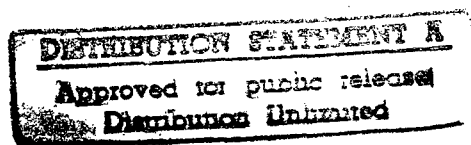




JPRS Report

Proliferation Issues



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PROLIFERATION ISSUES

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13 March 1992

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SOUTH AFRICA

Daily on U.S. Efforts To Curb Armscor's Deals

MB0103130792 Johannesburg SUNDAY STAR
in English 1 Mar 92 p 16

[By Staff Reporters: "Armscor [Armaments Corporation of South Africa] Under Fire From U.S."]

[Text] America may be about to stomp all over Armscor's [Armaments Corporation of South Africa] lucrative international arms deals in an effort to bring the mega-earning arms giant back into the fold of world thinking.

George Bush's dream of a more peaceful new world order makes it imperative that the world's armaments traders be brought into line first.

But, it seems, Armscor's hawks won't listen to reason and America may be poised to flood the eager international arms market with its own products, at prices which would make Armscor look like a corner grocer charging highly inflated prices. The strategy could force Armscor out of the running.

South Africa recently rejected U.S. appeals to join the Western protocol aimed at controlling the export of missiles, and it is being whispered that it was the Americans who stopped a multi-billion-rand arms deal between Saudi Arabia and South Africa as the first step to curbing Armscor's armaments trade and forcing back into line.

The US has denied reports that it was behind the Saudi decision, but some believe the command has already been given to zap Armscor—and to zap it hard.

There was a time when highflying Armscor—powered by a huge government cash fuel tank—seemed well out of range of ordinary economic, and even political, flak.

Now, though, it is in a tailspin because of the traumatic withdrawal of its government money (defence spending in South Africa has plunged from a high of about R13 billion [Rand] in 1989 to just over R9 billion in this financial year) and may have been mortally wounded by US moves to curtail South Africa's military muscle.

The US Information Service in Johannesburg denied press reports that Washington had put pressure on Saudi Arabia to pull out of the G-6 deal.

The Americans have not denied reports that the US ambassador to Pretoria, Bill Swing, met South African government and Armscor officials last week to warn them to curtail their weapons sales and their missile development programme.

Formed in the early 1970s as a way of combatting international arms embargoes, Armscor quickly grew into a sophisticated and capable manufacturer.

With managerial assistance in the early years from Barlow Rand top executive Johan Maree (Barlows and its subsidiaries became heavily involved in the arms industry over the years), Armscor became a fertile breeding ground.

With the benefit of having a nearby battle testing ground in Namibia and Angola, the corporation's engineers turned out the world-beating G-5 and G-6 155 mm howitzers, they modified the Russian "Stalin Organ" rocket launcher into their own, more reliable, version called the Valkyrie. They produced SADF [South African Defense Force] requirements ranging from small arms to armoured vehicles and jet fighters.

The SAAF [South African Air Force] also put a wide range of Armscor products into its inventories, as did the Navy.

When the production lines were going full steam, towards the end of the 1980s, Armscor's annual sales were estimated at about R5 billion. Of that, experts reckoned that at least R1 billion was earned in exports.

Armscor has remained tightlipped about where its weapons go, but down the years there have been reports of the corporation's products turning up in many global trouble spots.

Most recently, one of the biggest headaches for the Allies in Operation Desert Shield's liberation of Iraqi-occupied Kuwait, were the G-5s of Iraq. Had they been used more effectively, Saddam Husayn's forces may have been more difficult to defeat.

The corporation's operations have now been split into two, with a high-technology arm looking to effect civilian applications of military technology.

And the swords have been beaten into ploughshares.

High-tech sonar developed for the Navy is now being applied commercially, in fish-finding devices, while frequency-hopping technology used in SADF radios is now used in M-Net decoders.

Carrier Rocket To Launch Australian Satellite**Long March 2-E**

*OW0303090892 Beijing XINHUA in English
0852 GMT 3 Mar 92*

[Text] Beijing, March 3 (XINHUA)—A new member of China's carrier rocket family, the Long March 2E, will launch an Australian satellite March 22, Chinese rocket experts told XINHUA.

This means that China now has the capacity to launch satellites of different weights to distant, middle and near-earth orbits, making it one of the few countries with a complete set of carrier rockets, the experts said.

They said that China's Long March 1, Long March 2, Long March 3, Long March 4 and Windstorm 1 rockets have launched 31 satellites, including near-earth orbit retrievable satellites, distant-orbit geo-stationary telecommunications satellites and middle-orbit solar synchronous satellites.

In designing, developing and manufacturing those rockets, China has succeeded in developing new techniques for satellite retrieval and for launching multi-satellites with one rocket. It has also made progress in monitoring and controlling satellites and launching geo-stationary telecommunications satellites.

According to scientists, the Long March 4 is a three-stage rocket using conventional propellant. It has successfully sent two experimental satellites into solar-synchronous orbit 900 km from the earth. The Long March 3, fueled by liquid hydrogen and oxygen, is able to propel 1.4-ton satellites into geo-stationary orbit 36,000 km from the earth. And the Long March 2 rockets have launched 12 retrievable satellites weighing 2.5 tons each into near-earth orbit, setting a record of 100 percent success.

The experts said that the Long March 2E carrier rocket, which has a capacity of a nine-ton payload, are more suitable for launching the increasingly heavier commercial telecommunications satellites on the international market.

China has also set up a number of modern launching centers, a satellite control network and a telecommunications network to provide reliable backup services.

Carrier Rocket Development Viewed

*OW2902134392 Beijing XINHUA Domestic Service
in Chinese 0425 GMT 29 Feb 92*

[By reporter Xu Zhimin (6079 1807 2404) and correspondent Liu Linzong (0491 2651 1350)]

[Text] Beijing, 29 February (XINHUA)—A new member of China's carrier rocket family—the Long March 2 high-thrust strap-on vehicle—will officially come into use when we launch an Australian satellite on 22 March. This indicates that our country has the capability to launch high-orbit, middle-orbit, and low-orbit satellites

of different kinds and weights and has become one of the few countries in the world that exclusively possesses a relatively complete series of carrier rockets.

These reporters learned from relevant departments that the country has successfully launched a total of 31 satellites—predominantly low-orbit recoverable satellites, high-orbit stationary communications satellites, and middle-orbit solar-synchronous meteorological satellite—using carrier rockets such as the Long March 1, 2, 3, and 4 and the Storm 1. Designed, developed, and manufactured by China independently, these carrier rockets brought us one breakthrough after another in such key technologies as satellite recovery, multiple-satellite launching by a single rocket, satellite surveying and control, and the launching of synchronous communications satellites. Having produced gratifying results in the fields of carrier rocket technology and applied satellite technology, these rockets are playing an increasingly important role in man's peaceful use of resources in outer space.

These reporters were briefed that the Long March 4 is a type of third-grade rocket that uses conventional propellants and can be widely used for launching large middle-orbit and low-orbit earth-observation satellites. It has successfully carried two Chinese experimental meteorological satellites to a solar-synchronous orbit about 900 km above the earth's surface. Powered by advanced low-temperature and high-energy propellants made of liquid hydrogen and oxygen, the Long March 3 rocket's hydroxide propulsion system can rekindle under a gravity-free conditions to send a 1.4-metric-ton satellite into an earth-synchronous orbit 36,000 km above the earth. Used mainly for launching various kinds of near-earth satellites weighing up to 2.5 metric tons, the Long March 2 rocket has launched 12 recoverable satellites in a row, setting a satellite recovery record of 100 percent. Statistical information on astronautical experiments indicates that China's carrier rockets have reached an advanced international level that is similar to other products in terms of their overall technology and performance and the rate of successful launchings.

Astronautics experts believe that following the development of satellite technology, international commercial communications satellites are presently moving in the direction of greater capacity and weight. After the Long March 2 high-thrust strap-on vehicle is officially put into commercial use, our rockets' near-earth satellite-carrying capacity will be upgraded to about nine metric tons. As such, our carrier rocket series will be improved to meet the international astronautics market's needs to launch large satellites.

In addition, the country has successively constructed a number of astronautical launching fields and established networks of satellite surveying, control, and communications to provide reliable technological security for launching various kinds of carrier rockets.

Delegate Calls for Chemical Weapons Solution

*OW2102130892 Beijing XINHUA Domestic Service
in Chinese 0710 GMT 21 Feb 92*

[Text] Geneva, 20 February (XINHUA)—Hou Zhitong, head of the Chinese delegation to the Geneva disarmament meeting, emphasized here recently: Future chemical weapons conventions must impartially solve the problem of chemical weapons that have been left behind and unequivocally stipulate that those weapons must be destroyed by whoever left them behind.

Hou Zhitong expressed this position in his letter to (Jikak), chairman of the Geneva disarmament talks, and in two working documents submitted to the meeting by him, concerning chemical weapons left in China by foreign countries.

Hou Zhitong emphatically pointed out: The convention on total ban and complete destruction of chemical weapons under discussion at the meeting must impartially solve the problem of chemical weapons that have been left behind, and unequivocally stipulate that they must be destroyed by whoever leaves them behind. On this premise, we should not rule out that the countries concerned find a proper and concrete solution through consultations.

The Chinese delegation told reporters today that the two documents submitted are "some information on chemical weapons left behind in China by foreign countries" and "China's principled stand and suggestions on the question of chemical weapons that have been left behind." They describe in detail the number, variety, and distribution of chemical weapons left behind in China by foreign countries.

The disposal of chemical weapons that have been left behind is one of the major topics of the talks on a convention on chemical weapons.

Beijing To Give Algeria Reactor 'for Research'

*OW2902020492 Beijing XINHUA in English
0133 GMT 29 Feb 92*

[Text] Vienna, February 28 (XINHUA)—The International Atomic Energy Agency (IAEA) has empowered its director-general, Hans Blix, to sign a treaty with Algeria whereby China will provide Algeria with a nuclear reactor for research.

The authorization came from the meeting of the IAEA Board of Governors that has just ended, say sources in the Chinese permanent mission to the agency.

China has agreed to give Algeria a reactor of 15,000 kilowatts and the heavy water and fuel it requires.

Algerian delegates to the meeting have spoken highly of China's cooperation in this field, saying it is a model of south-south cooperation.

In other developments, the board approved Syria's request for IAEA help in transferring a neutron reactor and fuel from China to Syria.

IAEA Allows Algeria, Syria To Import Reactors

*OW2902163592 Beijing XINHUA Domestic Service
in Chinese 1028 GMT 29 Feb 92*

[By reporter Yang Huanqin (2799 3562 0530)]

[Text] Vienna, 28 February (XINHUA)—At a recently ended council meeting, the International Atomic Energy Agency [IAEA] adopted a resolution authorizing its director general to sign a guarantee agreement with Algeria concerning the supply of a Chinese nuclear reactor to Algeria for research purposes.

According to a Sino-Algerian agreement on nuclear cooperation, China has agreed to provide Algeria with a 15,000-kilowatt nuclear reactor for research purposes, as well as the heavy water and fuel it requires.

Speaking after the adoption of the resolution, an Algerian delegate expressed appreciation for China's cooperation and called it a model of South-South cooperation.

The IAEA council meeting also approved Syria's import from China of a 30,000-kilowatt miniature neutron reactor and the concomitant fuel.

Nuclear Industry's Achievements at Home, Abroad

Dual-Use System

*OW2802142692 Beijing XINHUA Domestic Service
in Chinese 0801 GMT 27 Feb 91*

[Report by reporter Zhuo Peirong (0587 1014 2837): "A New Nuclear Industrial System Catering To Both Military and Civilian Sectors Has Taken Shape in China"—XINHUA headline]

[Text] Beijing, 27 February (XINHUA)—Thanks to 10 years of hard work, the project to readjust the development of the nuclear industry—approved in 1981 by the central authorities—has on the whole been completed. Last year, the readjustment of the nuclear military industry was basically achieved, and the output value of civilian products churned out by the nuclear industry surpassed that of military products for the first time. The line, policies, and guiding principles for nuclear science, technology, and industry are well defined in terms of technology, equipment, and development. A new nuclear industrial system that caters to both military and civilian sectors has taken shape in China.

The major sign indicating the formation of this new system is the smooth takeoff of the nuclear power industry. The Qinshan nuclear power station has been successfully connected onto the power network and has begun to generate electricity on a trial basis. Construction of the Dayawan [Daya Bay] nuclear power station

has entered a crucial phase. Work on the second phase project of the Qinshan nuclear power station and the preliminary work for other nuclear power stations are actively under way.

Meanwhile, diversification of the nuclear industry by applying advanced nuclear technologies to other fields of economic construction has borne very good results. Last year, the Xinning sugar mill under the Xinjiang Ore Smelting Bureau and the production line for titanium dioxide at the No. 272 plant began to produce qualified products. The titanium dioxide project at the No. 404 plant, the large chemical fertilizer factory at the No. 816 plant, as well as the production lines for magnesium at the No. 202 plant and the No. 712 mine are at the peak of installation. Progress has been made in gold mining—ranging from prospecting techniques to the refining process—as well as in the rare earth industry—ranging from the production of raw materials to the development of new products; and a number of deposits have been verified. Good results have been achieved in a host of technological development projects, including fire alarm systems, high-efficiency filters, and plasma cutters.

Along with the formation of the new industrial system, China's nuclear industry has in recent years also made progress in scientific and technological cooperation with foreign countries, as well as in foreign trade. The industry's exports have expanded from nuclear to non-nuclear products. In 1991, the export volume of machinery and electrical appliances upped by 150 percent from a year earlier. Not long ago a contract was signed for China to export a nuclear power station to Pakistan, signaling China's nuclear power technology is going international. China has signed memorandums of understanding with Australia and Indonesia for cooperation in the peaceful utilization of nuclear energy, and has expanded exchanges in nuclear science and technology with France, Japan, the former Soviet Union, and a number of Third World countries. Moreover, the Standing Committee of the National People's Congress has passed a decision allowing China to join the "Nuclear Nonproliferation Treaty."

More on Qinshan, Daya Bay

HK2502025592 Beijing CHINA DAILY in English
25 Feb 92 p 1

[By staff reporter Li Hong: "Nuclear Industry Shifting to Civilian"]

[Text] The Balance of China's nuclear industry production has shifted and is now more civilian—and profitable—than it is military.

The changeover has primarily come through building nuclear power plants and exploring new products such as isotopes, radiation therapy and other medical technology.

The solely State-owned industry used to exist only to fulfill government military contracts. But last year, the

industry saw a 14 percent increase over 1990 in its civilian sales, which accounted for 54 percent of its annual total.

Following the successful commissioning last December 15 of the country's first Chinese-built nuclear power station—the Qinshan station in Zhejiang Province—the industry is now on course in its 10-year technology development programme.

It aims to achieve the following goals before the year 2000:

- Research, production and marketing of 600,000-kilowatt water-pressurized power reactor.
- Improvement and commercialization of the Qinshan 300,000-kilowatt water reactor, and development of three other advanced-technology reactors.
- Boosting research and production of new civilian products such as isotopes, radiation therapy and other medical technology.

The industry expanded its exports by 15 percent last year, with more varieties of civilian and non-nuclear products, according to officials of the China National Nuclear Corporation (CNNC).

The industry's shift from military hardware to the civilian sector, which began several years ago, is part of the country's general emphasis on economic development, CNNC officials said.

Now, officials said, the industry has decided to "rely on itself in addition to absorbing foreign technologies" in order to generate more nuclear electricity, which is much needed in China's fast-developing southeast provinces.

This year, CNNC will try to make the Qinshan station generate electricity at full capacity by June, and the National Nuclear Safety Administration will carry out two inspections prior to issuance of operation certificate to the station.

Production of the Daya Bay Power Station in Guangdong Province will enter its final experimental stage this year. The first 900,000-kilowatt generator is expected to begin operating next summer, CNNC officials said.

Due to increasing installation work and delay in some supply of materials, the station's operation has been postponed by a year.

Also in 1992, CNNC will have to complete preparatory work for the scheduled two 600,000-kilowatt water-pressurized generators in Qinshan.

And, it will be busy helping Pakistan to build a 300,000-kilowatt power station, according to a contract signed late last year between CNNC and Pakistan Atomic Energy Committee.

China joined the Nuclear Non-Proliferation Treaty late last year, which CNNC said would promote scientific

and technological co-operation on nuclear energy between China and other countries.

"It makes the importers understand their imported nuclear technology and products from China are solely for peaceful use," said an official.

Scientists Develop Steel for Nuclear Reactors

*OW2002125992 Beijing XINHUA in English
1143 GMT 20 Feb 92*

[Text] Chengdu, February 20 (XINHUA)—Chinese scientists have developed the high quality steel and welding materials used in the construction of nuclear reactors, thereby ending China's dependence on imported materials.

A recent expert appraisal revealed that the materials used to build pressure containers for nuclear reactors equal international standards of the mid-1980s. The fact that the materials were developed in China indicates that the quality of Chinese produced steel equals the quality of similar steel produced in the United States, Germany, France, and Japan.

The 300-megawatt Qinshan Nuclear Power Plant—the first of its kind in China—was required to import pressure containers from Japan at a cost of over five million U.S. dollars.

As a result, the State Council decided that the second phase of the project, which includes the installation of a 600 megawatt nuclear power plant, will use domestically produced materials.

Experts say that pressure container is a key aspect in the construction of a nuclear power plant, and that the manufacture of the item is an extremely important measurement of a country's scientific and technological level.

The six million yuan project to develop the containers in China required a 10 year effort by the country's nuclear, metallurgical and machine-building experts.

The service life of the steel made in China is 40 years.

JAPAN

Project Team Formed for CIS Nuclear Plan

*OW2202121592 Tokyo KYODO in English
1142 GMT 22 Feb 92*

[Text] Tokyo, Feb. 22 KYODO—The government plans to sponsor an international conference in Tokyo to discuss the control of plutonium and uranium from dismantled nuclear weapons of the former Soviet Union, government sources said Saturday.

The date is not fixed but the conference will be cosponsored by the Paris-based Nuclear Energy Agency, an affiliate of the 24-member Organization for Economic Cooperation and Development, the sources said.

Japan will call for participation by nuclear experts from countries with advanced nuclear technology, such as Belgium and Switzerland, as well as members of the seven major industrialized countries, they said.

To prevent jobless nuclear scientists of the Commonwealth of Independent States (CIS) from being recruited by Third World countries, the United States, Russia, and Germany agreed Monday to set up an international scientific and technological center to employ the scientists for peaceful research.

It is estimated there are some 30,000 tactical and strategic nuclear weapons in four former Soviet republics—Russia, Belarus, Ukraine, and Kazakhstan.

There has not been an international agreement on the control of dismantled CIS nuclear weapons.

Japan has set up a interministerial project team to discuss a plan for the dismantled arsenal, which will be submitted to the conference, the sources said.

NORTH KOREA

DPRK To Pass Nuclear Supervision Accord in Apr

*OW2602020892 Beijing XINHUA in English
0146 GMT 26 Feb 92*

[Text] Vienna, February 25 (XINHUA)—The Democratic People's Republic of Korea (DPRK) will approve the nuclear supervision agreement in April.

O Chang-nim, head of the DPRK delegation to the board meeting of the International Atomic Energy Agency, said at a press conference here today that he could "guarantee that our parliament will pass the agreement" then.

The agreement, signed here between the DPRK and the agency last month, stipulates that the agency will send a supervision team to the republic and that the DPRK must provide the agency with a list of its nuclear facilities immediately after the agreement is passed.

An agency spokesman said the supervision team would start work in June if nothing unexpected happened.

O Chang-nim denied charges that the DPRK is developing nuclear weapons. He said nuclear research in the republic was solely for peaceful purposes.

SOUTH KOREA

Japan To Build Nuclear Fuel Reprocessing Facility

*SK2602063992 Seoul KYONGHYANG SINMUN
in Korean 25 Feb 92 p13*

[Article by correspondent Kim Ui-tae from Aomori Prefecture, Japan]

[Text] Amid international controversy over Japan's plan to import large quantities of plutonium, Japan is moving to become one of the powerful nuclear countries by actively pushing ahead with construction of a large-scale nuclear fuel reprocessing facility. Thus, such a move by Japan is causing the world deep apprehension.

According to the plan revealed by Japan, it is going to invest a total of 840 billion yen [equivalent to \$6.51 billion] to build a used-nuclear fuel depot capable of storing 8,000 tons by 1995 and a reprocessing plant capable of reprocessing 800 tons annually by 1999 at a 932.95-acre site in (Iyasakatai District), (Rokashomura), Aomori Prefecture.

Regarding this plan, Sato Niochi, deputy chief of the nuclear fuel public information center in Rokashomura, said that the Japanese Government will apply for a construction permit sometime this year after inspection by the safety inspection committee.

Sato added that the plan is part of a long-range Japanese plan for self-sufficiency in nuclear fuel used by Japanese nuclear power plants.

In addition, Japan is planning to invest some 180 billion yen [equivalent to \$1.4 billion] to complete construction of a uranium enrichment plant with a capacity of 150 metric tons per year during this year. Through extension every year, Japan plans to ultimately expand the plant to enrichment capacity of 1,500 metric tons per year, achieving self-sufficiency in nuclear fuel from early 21st century on.

In (Tokaimura), (Ibaraki Prefecture), pilot nuclear fuel reprocessing facilities were installed already in 1977 and have reprocessed some 300 metric tons of used-nuclear fuel up to the present, extracting plutonium that can be used as fuel for nuclear power plants. Japan failed to put it into industrialization use due to lack of commercial viability, however.

Currently, the United Kingdom and France have reprocessing plants capable of reprocessing 1,500 metric tons per year and 2,200 metric tons per year, respectively.

To effectively use nuclear fuel, in particular, Japan has developed a thermal reactor which uses, as raw material, plutonium blended with Uranium 235 and a fast breeder reactor which can use only plutonium as raw material. These two reactors are now under performance test.

Up to the present, Japan has imported the enriched uranium [semifinished material] in whole quantity. From next year on, Japan will import inexpensive uranium ore and operate the first phase of enrichment facilities which can extract pure uranium by centrifugal separation method.

As Japan is a resource-poor nation and atomic energy is an important energy source for it, Japan is investing heavily in nuclear-related fields.

As of the end of January, a total of 41 nuclear reactors are in full operation. As a result, the ratio of total power generated by the nuclear power plants amounts to 27 percent. Another 12 nuclear reactors are now under construction. Two additional reactors are under planning stage.

Japan will up the ratio of power generated by nuclear reactors to 35 percent in 1995 and 40 percent in 2000, respectively.

The construction of the low-level radwaste disposal plant, which is being built with a project cost of 160 billion yen [equivalent to \$1.3 billion] at the 885-acre site in (Oisitai District), Rokakshomura, is progressing as planned and will be put into commission around December this year.

Sato said that this coming April an exclusive radwaste carrier will carry eight drums of radwaste and will put in port inside the disposal site. He continued to say that in the port, a simulated unloading will take place.

The first phase of facilities, which will be completed some time this year, will have the capacity to store 1 million 200-liter drums and will be expanded to hold 3 million in the future.

The radwaste disposal method consists of shallow land disposal including French (Reman) and the U.S. Barnwell. This method requires that we dig 12-meter-deep caves, make several 6-meter-high ferro concrete rooms, pile radwaste drums, and cover the drums with Bentonite in two meter thickness and with ordinary earth on top of Bentonite in four additional meters thickness.

The residents at the disposal site understand the construction of the low-level radwaste disposal site, but some feel uneasy about the possible construction of the high-level radwaste disposal site. The Japanese Government has not yet made a decision on the construction of the high-level radwaste disposal site.

DPRK Bolsters Defense Around Nuclear Facility *SK2602123692 Seoul YONHAP in English 1226 GMT 26 Feb 92*

[Text] Seoul, Feb. 26 (YONHAP)—North Korea is building up the defense of its nuclear facilities in Yongbyon, some 90 kilometers north of Pyongyang, increasing anti-aircraft emplacements from five to more than 40, a high-ranking officer of the Joint Chiefs of Staff said Wednesday.

The officer said the increase had been confirmed through the U.S. intelligence network.

He said North Korea was also found to have been building an underground tunnel near Yongbyon "apparently in preparation for air attacks on its nuclear facilities."

Meanwhile, the government has decided to name Lt. Gen. Song Ung-sop, a vice chairman of the Joint Chiefs of Staff, as South Korean head of the inter-Korean Joint Military Committee and appoint three other military officers and three civilians as members of the Committee.

The two Koreas plan to hold the first meeting of the Joint Military Committee on March 13.

North Korea wants the committee to be formed by seven military officers each from both sides, but the South opts for a mixed presence of officers and civilians, such as officials of the National Unification Board and the Foreign Ministry.

As for the annual South Korea-U.S. Security Consultative Meeting, the officer said, it was likely to be held in September.

Uranium Imports Rise in 1991

SK2702084192 Seoul YONHAP in English 0542 GMT 27 Feb 92

[Text] Seoul, Feb. 27 (YONHAP)—Korea's imports of uranium for generating nuclear power plants amounted to 254 million U.S. dollars last year, up 3.5 percent over 1990, officials at the Energy-Resources Ministry said Thursday.

The officials said uranium was imported from Canada, the United States and France for 23 dollars per pound on an average.

TAIWAN

Defense White Paper on Advanced Weapons *OW2302175592 Taipei CHUNG KUO SHIH PAO in Chinese 18 Feb 92 p 9*

[Special report on "National Defense White Paper" released by Defense Ministry on 17 February: "Develop Advanced Weapons and Establish a Three-Dimensional Defense System"]

[Text] The Chungshan Institute of Technology and Science and Research and Development of Major Weaponry

I. The Tasks of Research and Development and Achievements of the Chungshan Institute of Technology and Science

1. Tasks and Organization:

The Chungshan Institute of Technology and Science was established 24 years ago in 1968. It has over 6,300 scientific and technological personnel and over 8,500 technicians. Its main task is to conduct research, development, and design for national defense science and technology. In recent years, it added the manufacture of developed military products.

The major units of the institute are the four research institutes and six research and development and manufacturing centers. All the research and development units adopt the matrix system in their organization to meet the needs of research and development tasks. Apart from the specialized units, (such as the various institutes and centers,) under regular groups, planning units (such as the An-hsiang, Tien-kung, and Hsiung-feng planning offices), are established under the task groups. In specialized units, heads of special departments (such as chairmen and directors) are responsible for the development of specialized scientific and technological fields. In planning units, heads are responsible for the management of research and development plans and the integral system. The powers of the two are differentiated but they coordinate and cooperate with each other to complete the tasks of research and development jointly.

Air Defense Weapons Fully Developed

2. The Capability of Research and Development:

a. Aviation. We have the capability to design, conduct analysis and simulation, assemble, and test fly aircraft and aircraft engines.

b. Rockets and Missiles. We have the capability to design, develop, assemble, and test fire large caliber and long-range rockets, as well as various tactical missiles.

c. Electronics. We have the capability to develop radar systems (radar for aviation use and various types of exploring, illuminating, and tracking radar systems); gun-firing systems; various types of equipment for electronic warfare; various types of signal and security equipment for military use; various types of electronic elements and components; various types of laser radar equipment, underwater reconnaissance equipment, and underwater weapons.

d. Chemistry. We have the capability to develop various types of propulsive fuels, high-performance explosives and special warheads; various means of safeguarding our

weapons and equipment against reconnaissance, corrosion, and humidity; various types of protective equipment against chemical warfare; and various types of incendiaries, smoke screens, and fire-extinguishing chemicals.

e. Materials. We have the capability to develop various types of special batteries (seawater batteries, silver-zinc batteries, thermobatteries, and aluminum-lithium batteries) for military use; composite materials; superalloy materials; ceramics materials; and optical and electrical materials and elements (infrared monitoring devices).

f. Quality Control. We have the capability to monitor electromagnetic jamming, conduct environmental testing, conduct testing in automation, assure the quality of materials, and repair equipment and installations.

g. System simulation and integral projects. We have built several large-scale facilities for the simulated testing of missile systems and the capability to develop systems software. We also have the integral capability to develop combat systems for warships.

h. Overall logistics support. We have built the combat systems for aircraft, missiles, and electronics, and the capacity for logistics projects and logistics support.

3. Research Achievements:

a. Systems already produced or deployed: These include the Kung-feng 4 and Kung-feng 6A rockets; the Hsiung-feng 1 and 2 missiles; the artillery fire command system; the warship sonar system; the warship electronic warfare system; and the Tzu-chiang trainer aircraft.

The Tien-kung [Sky Bow] Missiles Will Come Into Service in 1994

b. Systems currently under production or being prepared for production. These include the Ching-kuo fighter aircraft, the Tien-kung 1 and 2 missiles; and the Tien-chien [Sky Sword] 1 missiles.

c. Systems currently under development. These include the Tien-chien 2 missiles; the Ta-cheng naval automatic command and communication system; the joint services electronic warfare equipment and outfit system; and the Kuang-hua naval combat system for second-generation warships.

II. The Research and Production as well as Future Development of Main Weapon Systems of the National Army

The main weapons and equipment of the National Army are planned for the long-term and according to the idea of overall development. Their strategic concepts are based on future enemy activities, and the need for weapons and equipments are formulated according to specific policy decisions and working procedures. When it is necessary to procure them from overseas, they are carried out according to the working procedure for such purposes.

1. The present state of research and development of the main weapons and equipment of the National Army.

a. The research and production of the Ching-kuo fighter aircraft.

Four prototypes of the Ching-kuo fighter aircraft (three single-seater and one twin-seater) have been produced. The engines and relevant avionic equipment for test flights have also been completed, and comprehensive test flights are currently being conducted in earnest. A first-run production of 10 aircraft has been planned, and the first is due for delivery on 1 April 1992, the last by December 1993. They will be used for assessing the aircraft's combat performance. It is estimated that by the end of December 1999, a total of 250 fighter aircraft will have been produced. Although the Number 2 prototype crashed during the test flight, research and production units are examining the cause to improve on its shortcomings. The original plan is progressing as scheduled.

Strengthening the Antisubmarine Combat Capability

b. The Tien-kung missile system.

The first battery of Tien-kung missiles was completed in August 1989. They have been handed over to the Army for a year of testing and training. Presently, we are actively trying to improve and perfect the system to enhance its functions in the original design. In the organization of their production, we are presently preparing the materials required to produce them in numbers. We will adopt the method of research, development, and production, and it is estimated that the system will be deployed in the services in 1994.

c. Tien-chien missiles.

i. The Tien-chien 1 missile was successfully tested with warheads at the end of 1987. Reliability tests began on 1 January 1988. At present, it has completed 1,400 hours of test flying with payloads and is frequently test-fired into the air. When these tests are completed, preparation for their production will begin.

ii. The Tien-chien 2 missile has completed many test firings and continues to be tested according to plan.

d. Hsiung-feng missiles.

i. The Hsiung-feng 1 missile system is now in service with the Navy's destroyers and fast missile boats, and its deployment along the coast has also been completed.

ii. The first battery of the Hsiung-feng 2 missiles was deployed in June 1991 and has been placed in combat readiness. It is hoped that the required missiles will be produced as scheduled. Missiles for use by aircraft are presently in the process of research and development.

e. Construction of second-generation warships.

An Increase in Production of 480 Tanks

i. Guided missile frigates. These vessels are designed mainly for antisubmarine warfare. At the same time, they are equipped with air defense and surface combat capability with a view to enable us to fight the enemy's blockade. We plan to build eight such vessels within a period of 10 years. Construction of the first ship began on 7 January 1990 and is projected to be delivered to the Navy in May 1993. Thereafter one ship will be delivered every 11 months, and the program for the eight vessels will be accomplished by October 1999.

ii. Guided missile patrol boats. Recently the Navy has been cooperating with a certain famous European shipyard on the plan to build these vessels, and work is presently under way in earnest.

f. The cooperative production of M48H tanks. The M48H tank was officially named the "Yong-hu Tank" [Brave Tiger] on 14 April 1990 and is now in service with the Army. It is projected that 450 will be produced by 1993 to strengthen our defense capability on land.

Taking Into Account Low Cost and High Returns

2. Concept on the development of main weapons and equipment in future.

We will work hard to develop weapon systems that are low-cost and have high-yield returns, and to enhance our defense, deterrence, and combat strength. The research and development of major weapon systems is directed at the enemy's threat, prediction on the form of future warfare, and the trend of weaponry development. We determine our weapon and equipment requirements in accordance with our long-term planning and the principle of all-around development, and on the basis of the concept for army building and the plan for building our military strength. We adopt the model of even development in our strike, defense, and mobility capabilities, and take into consideration their adaptability and safety. On the principle of "each equipment having many uses and every system being used by all three services," we follow the path of technological transfer, technical cooperation, performance improvement, and research and development on our own. Year by year and period by period, we have developed and equipped our troops with weapons systems that are technologically advanced, reliable, low-cost, and low-risk with a view to enhance our defense and combat capability.

THAILAND

Energy Official: Research Center To Be Built

92WP0126A Bangkok DAILY NEWS in Thai
16 Dec 91 p 3

[Unattributed report: "The First Nuclear Research Center To Be Built"]

[Text] Dr. Pakit Kirawanit, the secretary-general of the Office of Nuclear Energy for Peace in the Ministry of Science, Technology, and Energy, allowed himself to be interviewed by correspondents concerning the possibility that Thailand would build a nuclear power plant in the near future. He said that inasmuch as there was less and less coal left, it was probably the country's last option. But the important point was that the government still did not have a clear policy for the use of electricity. If it expected to build a nuclear power plant in 10 years, it would have to specify how much electricity was to be produced, and there would have to be energy conservation. In the preparations for the construction of the power plant there would have to be specialists and a site. The construction site would have to be on the coast either on the Gulf of Thailand or the Andaman Sea. The site would require 100 to 200 rai [a rai equals about 0.4 of an acre]. It was important for the government to build understanding of the project among the people especially those who were afraid of nuclear power. It would have to make them change their thinking about the project by

explaining the strengths and weaknesses, the supervision and the safeguard systems. If this were done, it might not be too frightening.

"For example Japan had an encounter with nuclear energy in World War II but now has built 40 nuclear power plants and has plans to build a total of 80 plants. In addition the terrain in Japan is generally volcanic in origin with fault lines in many locations, but they were still able to accomplish the project. The terrain in Thailand is very favorable and so would be more suitable for construction. And of particular importance every day we are using coal which causes environmental damage—it causes the temperature of the world to rise and produces ashes, particles and sulfur emissions, which cause acid rain and hurt agricultural production," Dr. Pakit said. He also said that in 1992 his office would build a nuclear research center in Ongkrak District, Nakhon Nayok Province. Its primary function would be to produce radioactive elements for use in medicine, agriculture and industry and thus reduce imports of radioactive elements from abroad.

YUGOSLAVIA

Uranium Processing Technology Offered to PRC

AU0403133492 Ljubljana DELO in Slovene
27 Feb 92 p 3

[Gregor Pucelj report: "Selling Merely the Plant for the Processing of Uranium Ore"]

[Text] Ljubljana, 26 Feb—Yesterday's information about the visit of Slovene Foreign Minister Dr. Rupel to China provoked a considerable response from the public, as it was, among other things, reported that Rupel also offered "nearly the new technology of the Zirovski Vrh uranium mine" to the Chinese side.

We requested a more detailed explanation from Engineer Marjan Ursic, director of the Zirovski Vrh uranium mine. "As is known, the uranium mine has not been functioning for about a year and a half and is practically in the process of being closed down completely. That is why we are seeking new production programs for some of the mine plants. The plant for the processing of the uranium ore into yellow cake [rumena pogaca] is the most valuable, provided that it continues with the activities it was intended for. Therefore, it is understandable that we would be most pleased to get a buyer for it. Of course, this only means that if the Chinese decide to buy it, they would dismantle the whole plant, that is to say all of the equipment for the processing of the uranium ore into yellow cake, and take it away from the Zirovski Vrh uranium mine. In no case would our offer mean that such production would resume on the current location in the Zirovski Vrh uranium mine."

Eng. Ursic added that no special talks were held with the Chinese about the aforementioned offer. However, the Zirovski Vrh uranium mine informed the Foreign Ministry as well as other government departments of their problems and their search for a solution some time ago. The mine should actually thank Dr. Rupel for behaving in such a "businesslike" manner on the visits, like the one to China.

[box]

If the Zirovski Vrh uranium mine, that is to say, if Slovenia, succeeds in selling the entire technology for the processing of the uranium ore into yellow cake, it would make a profit of several million dollars. All other solutions—the last one being to sell the plant for scrap metal—would, of course, be considerably less profitable.

Arms, Missiles Arrive in Croatia Despite Embargo

92BA0575A Belgrade POLITIKA in Serbo-Croatian
27 Feb 92 pp 1, 9

[Article by Blagoje Komljenovic: "Croatia Is Getting Jet Planes"]

[Text] Two resolutions of the Security Council on the embargo against the sale of arms to Yugoslavia (No. 713 dated 25 December and No. 724 dated 15 December) continue, unfortunately, to be violated. And while we look with optimism toward the arrival of the "blue helmets," convinced that peace will permanently prevail in this earthquake-prone Balkan region, arms are reaching Croatia daily. The other day, Franjo Tudjman, commander in chief, boasted in public that they have 150,000 soldiers armed with the most up-to-date weapons for killing people.

When on 2 January our government sent to the United Nations a memorandum on noncompliance with the resolutions concerning the embargo, listing numerous specific examples of countries, firms, and individuals involved in this dirty business, protests came back to us concerning supposedly "fabricated" facts. We hoped that the public disgrace and new warning from the Security Council would influence the protagonists of the Yugoslav fire; however, what we have learned most recently refutes this. What is more, one would say that recognition of the sovereignty of Slovenia and Croatia was welcome to many people, and now they are delivering to the new states what until yesterday was concealed—tanks, airplanes, missiles, and launching ramps.

POLITIKA has managed to expose as an exclusive some of the numerous deliveries of arms and military equipment to Croatia since the beginning of this year. Thus, on 14 January two trailer trucks were dispatched from Basel, Switzerland, via Italy and Slovenia with dozens of Stinger surface-to-air missiles, mortars, and other equipment for waging war. The purchase was made in Germany and Switzerland through the firm BHM in Basel. The next day, this time from Zurich to Zagreb via Hungary, four vans were dispatched with small-arms ammunition. Also on 15 January a convoy of nine towed vehicles loaded with missile weapons passed from Austria through Novo Mesto.

Tanks continue to be sent from Germany to the Croatian fighting forces. In the port of Rijeka, on 22 January 32 armored vehicles manufactured in Germany were unloaded, and toward the end of last year (19 December) all of 80 tanks reached the same port from the same friend.

And then on 24 January a ship reached Rijeka with a shipment from the United States weighing 17.5 tons, and armament and military equipment to meet the needs of the Croatian Ministry of Defense were packed in the containers.

Missiles and Launching Ramps From Poland

On the night between 28 and 29 January, two transports were sent from Zurich to the NDH [Independent State of Croatia]. That train, which passed through Austria and Hungary, brought six tanks made in Germany, two "Pinzgauer" vehicles, and three ambulances. In addition, 23 military vehicles have been driven to Rijeka via Milan and Trieste.

Croatia concluded a contract in late January, with the Poles, with the consent of the official authorities of that state, to purchase 250 Strela 2-M missiles and 25 launchers for them. In order to deceive the world public, the papers state that the purchaser is from the Philippines, and the transport would be made by an airline from Nigeria.

POLITIKA has learned from reliable sources that within days the Croatian Army will receive jet airplanes from its comrades in Europe and systems for anti-air defense.

There are no longer any secrets about the armament of the Croatian ZNG [National Guard Corps] and MUP [Ministry of Internal Affairs], as there was in the well-known scandal of Spegelj and Hungary, nor does this go anymore exclusively through the Astra import-export house, once headed by Dr. Franjo Greguric, the present prime minister. Numerous private firms have also specialized in this lucrative business; among them the best-known are Promedei, Como, and Ribomaterijal, all three in Zagreb.

The new Croatian government is most frequently importing armament and military equipment, usually a surplus in East Europe and NATO, from Austria, Hungary, Germany, Poland, Italy, Czechoslovakia, Panama, Argentina, Switzerland, and certain other countries, which do not pay too much attention to the embargo of the UN Security Council. By land, this evil arrives by way of Austria and Hungary, by sea it comes to the ports of Rijeka, Kopar, Split, and Ploce, and now it is coming more and more by air.

Misuse of Foreign Exchange Savings

Arms are not cheap; in fact, just the opposite is true. For example, the price of a Stinger missile ranges between \$30,000 and \$50,000, a Kalashnikov about \$500, and almost every round fired costs 1 German mark [DM]. But so much of that has been imported and used so far in this bloody war! Truly, where does Croatia get all the money for this vice? Numerous Ustasha organizations all over the world long ago prepared and collected money for the resurrection of the NDH. The foreign exchange reserves of the republic and the foreign exchange savings of individuals have been misused. And certainly they have received abundant help from the banks of their allies: Deutsche Bank and Dresdner Bank AG in Germany, the Erste Oesterreichische Sparkasse Bank in Austria, but they are not the only ones.

Numerous loans have certainly been taken from governments and international companies. The loan will be paid back, perhaps, even by selling parts of the Adriatic, which is being talked about more and more loudly. Independence, then, is not cheap—it brings glory to some, the debts and dependence remain for others.

[Box, p 9]

Firms Sending Arms

Firms in Austria and Germany that have been most involved in the purchase and deliveries of arms to Croatia include the following: Industry Enterprise, Meiz, Waggengrosshandel, Gebrueder Schoeler g.m. BG, DKS, Atlantic, Huertenbert, Scorpion International Services S.A., Xandil International LTD Consulting, Electric Dalland, Weba, Faba, Foga, and Franconia-Jagd.

ARGENTINA

Materials for Atucha II Arrive From Germany

92WP0151B Buenos Aires LA PRENSA in Spanish
26 Jan 92 p 4

[Text] Equipment for Atucha II Power Plant Arrives

A total of 1,758 tons in 548 containers earmarked for the construction work at the Atucha II atomic power plant have arrived at the wharf where it is located, on the Parana de las Palmas.

The shipment, which was transported in the holds of the "Kielgratch" and purchased from the German firm Siemens, consists of two moisture traps weighing a total of 123 tons; three main pumps for the cooling water and their accessories, 227 tons; and a 29-ton sluice gate.

Rounding out the cargo are a 32-ton reactor fueling device, instrumentation and control components, special tools, air ducts, and valves, as reported in a press release from the National Commission for Atomic Energy (CNEA).

The chairman of the CNEA, Manuel Mondino, indicated that there would be a budget of around \$359 million this year to continue work on the power plant, which is located in the town of Lima in Buenos Aires Province.

Cancellation of Nuclear Shipment Announced

92WP0151A Buenos Aires CLARIN in Spanish
2 Feb 92 p 11

[Text] The government has decided to "cancel definitively" a nuclear shipment bound for Iran that had prompted repeated expressions of concern from the United States, official sources told CLARIN yesterday.

On Friday the Foreign Ministry told the governor of Rio Negro, Horacio Massaccesi, of its decision to prevent the sale by the state-run firm Applied Research Institute (Invap) to Tehran; it was part of an \$18 million contract.

According to these sources, the U.S. Government has pledged "to help seek" an alternative customer for the shipment so that Invap, of which the national government and Rio Negro own equal shares, would not go bankrupt.

It must be a country that agrees to monitoring by the International Atomic Energy Organization so that the shipment is not used in an atomic program for non-peaceful purposes.

According to Invap, only "machine tools" for atomic power plants were being sold, this being a peaceful purpose, but the Foreign Ministry suspected, without citing evidence, that more sensitive material was involved.

It is a policy of giving priority to relations with the United States over the possibility of having Invap, one of the few Argentine firms dealing in state-of-the-art technology, do business overseas.

The request to cancel the shipment, which may now prompt Iran to sue for breach of contract, was expressly made by U.S. Ambassador Terence Todman in a letter to Di Tella, as this newspaper had reported. The foreign minister also discussed the issue 10 days ago in Washington with the U.S. secretary for hemispheric affairs, Bernard Aronson.

Condor 2

Foreign Ministry sources consulted by CLARIN asserted that as of yesterday the government "had not made any organizational decision" about possibly dismantling the secret plant in Falda del Carmen, Cordoba, where the Condor 2 missile was built, as reported in the press.

On 28 May of last year Defense Minister Antonio Erman Gonzalez officially announced the decision to destroy the parts of the missile that could not be recycled into a missile project for peaceful purposes. He denied, however, that the plant, which cost between \$200 and \$300 million, was going to be dismantled, according to various sources.

The only thing that has been confirmed so far is that on the 10th of this month the brand new National Commission for Space Activities (CNAE), which is run by civilians and falls under the Office of President of the Nation, will take effective control of the plant, which after the Malvinas war built the medium-range (1,000 to 1,500 km) Argentine missile.

Book Details Background of Condor-2 Missile

PY0403201292 Buenos Aires CLARIN in Spanish
1 Mar 92 p 10

[Text] The decrees on the Condor-2 that were signed by former President Raul Alfonsin authorized the Air Force to appoint the German company Consen, a subsidiary of Messerschmitt-Bolkow-Blohm, GmbH (MBB), to act virtually as the "manager" [preceding word in English] for the technological, commercial, and financial aspects of the project. The strategic value of the self-propelled rocket for military use made the drafting of secret rules mandatory.

Iraq is not mentioned in the preambles or resolutions of Decrees 604, dated 1985, and 1315, dated 13 August 1987, however, as Economy Minister Domingo Cavallo asserted when he was foreign minister.

Cavallo's comments caused arguments during the congressional debate with the Radical Civic Union [UCR] party about whether to send ships to the Persian Gulf at the end of 1990, when there was fear that Iraq might use these Argentine missiles against Israel or another neighbor.

Although the book by journalist Daniel Santoro *Condor-2 Operation, the Secret Story of the Missile Deactivated by*

Menem has not been published yet, CLARIN has had an opportunity to read it. The book states that in these decrees—the contents of which were not known until now—Alfonsin declared the Condor-2 project—which caused the United States a great deal of concern—to be of national interest.

Washington and U.S. Ambassador Terence Todman were so interested in this secret project—through which Argentina attempted to develop an intermediate-range (1,000 to 5,000 km) missile—that a delegation of U.S. experts visited the secret facilities at Falda del Carmen, Cordoba, to confirm that the project had really been deactivated, as CLARIN had reported.

The U.S. delegation, which was headed by Robert Walpole, U.S. Department of State deputy assistant secretary for Political-Military Affairs, will submit a report to the U.S. Government's highest officials, who want to confirm that the Argentine Government's official promise to definitively deactivate the project and transfer it to the civilian sector through the National Space Activities Commission [Conae] had truly been fulfilled.

Official sources have reported to CLARIN that in view of the absolute inactivity of the facilities, "where a national formula to produce solid fuel" for the Condor-2 was developed, Walpole and Defense Secretary Juan Ferreira Pino had to remove cobwebs that were covering some of the high-technology equipment stored there.

The last chapter in this story is still missing, however. In a speech delivered to the nation on 28 May 1991, Defense Minister Antonio Erman Gonzalez promised "to render useless" the parts of the missile that cannot be recycled into a rocket intended for peaceful purposes.

It is also reported in the aforementioned book that the deactivation of the Condor-2—which can be launched directly at the Malvinas—was one of the conditions for resuming diplomatic relations that were imposed by the United Kingdom in 1990.

For the same reason and to avoid "a hostile act" against London after the Fire Focus maneuvers in the Malvinas, the UCR ordered the Air Force to suspend the launch of the first Condor-2. The rocket would have been launched from Cabo Raso, 130 km south of Rawson, with a conventional charge. President Alfonsin and Theodore Gildred, who was then the U.S. ambassador to Argentina, were invited to the ceremony.

The book also asserts that Brigadier Andres Antonietti, Military Household chief, conveyed confidential data on the financial aspects of the initiative to Cavallo and current Foreign Minister Guido Di Tella to use in a private meeting with the Air Force leadership and the defense minister, who did not accept the decision.

Among other problems for the government caused by the Condor-2—at one time Cavallo even threatened to resign—it is mentioned that Todman, tired of oral promises by high-ranking officials, sent Gonzalez a letter listing all the promises that had been made to him and that, as of 28 May, had not been fulfilled.

CUBA

Rodriguez Explains Castro Nuclear Arms Position

*FL0503132192 Havana Radio Progreso Network
in Spanish 1200 GMT 5 Mar 92*

[Text] On 4 March, Carlos Rafael Rodriguez, vice president of the Councils of State and Ministers, met with (Antonio Stemper Paris), secretary general of the organization for the ban of nuclear arms in Latin America, who is visiting Cuba.

Carlos Rafael Rodriguez explained Cuba's position, expressed at the first Ibero-American Summit by President Fidel Castro, to Ambassador (Stemper) [title as heard], saying that when all Latin American countries assume the responsibilities of the Tlatelolco Treaty, Cuba will also sign it in keeping with regional unity.

ALGERIA

Accord Permits IAEA To Inspect Reactor

LD2702212192 Algiers ENTV Television Network
in Arabic 1900 GMT 27 Feb 92

[Text] Algeria today reached a binding agreement with the International Atomic Energy Agency [IAEA]. This was announced today by an IAEA spokesman in Vienna.

The spokesman announced that the agreement will allow the IAEA to inspect the Salam nuclear reactor being built in Ain Ouessera. The IAEA also reports that following Algeria's invitation the IAEA has twice inspected the reactor.

INDIA

Hurd, Solanki Discuss Nonproliferation Pact

92WP0159A New Delhi PATRIOT in English
18 Jan 92 p 6

[Excerpt] The issue of India signing the Nuclear Nonproliferation Treaty (NPT) came up during the discussions between the British Foreign Secretary Douglas Hurd and Indian ministers on Friday.

In his talks with Minister of External Affairs Madhavsinh Solanki, Mr. Hurd expressed Britain's keenness on the NPT issue. Reiterating the country's stand, Mr. Solanki maintained that "so far as it is concerned our view is well known. We cannot be partial toward a treaty which is so discriminatory which avoids tackling nuclear proliferation globally.

Mr. Hurd, while admitting that India's signing the treaty depends on the relationship with Pakistan, expressed concern over the nuclear future. Mentioning that the Chinese, the French and the South Africans for example are warming up to the NPT idea, Mr. Hurd suggested that India and Pakistan should renew the efforts for removing the causes of distrust.

The British Foreign Secretary also made known Britain's favour on the United States proposals on the nuclear question, which looks for a five-way conference, bringing together the Russians, the Americans, the Chinese, the Indians and the Pakistanis.

According to an External Affairs Ministry spokesman, Mr. Solanki ruled out the possibility, maintaining that such issue has to be tackled globally and not regionally, "...Regional attempt to solve the nuclear issue would meet the same response from the Indian Government." [passage omitted]

BJP President Supports Delhi Stand on Bomb

92WP0158A Madras THE HINDU in English
22 Jan 92 p 7

[Excerpt] New Delhi, 21 January: Dr. Murli Manohar Joshi, Bharatiya Janata Party [BJP] president, today reiterated that India should produce a nuclear bomb immediately, given that both Pakistan and China already had this capability. Further, the possibility of some West Asian Islamic Nations joining hands with Pakistan could not be taken lightly.

Addressing a press meet here, Dr. Joshi said there should be no laxity in the nation's preparedness against any hostility. As Pakistan and China had the nuclear bomb, India had no choice. Asked if the BJP did not believe in dialogue for tackling such a situation, he said a dialogue could only be between two equals. "Otherwise it is a monologue in which the stronger party says and the weaker one obeys," he added. [passage omitted]

Delhi Not To Sign Nuclear Nonproliferation Pact

BK0303035092 Delhi All India Radio Network
in English 0245 GMT 3 Mar 92

[Text] The prime minister has reiterated that India will not sign the Nuclear Nonproliferation Treaty. In an interview to a news magazine, Mr. Narasimha Rao said the treaty is discriminatory as it does not provide for global nuclear disarmament. He said New Delhi is firm in its resolve not to make nuclear weapons.

On the question of Pakistan's support to militants in Jammu and Kashmir and Punjab, the prime minister said it continues to be a hindrance in improving the relations between the two neighbors. He expressed the hope that Islamabad will come to reality and work toward creating a better climate.

Article Favors Building Nuclear Arsenal

BK2802101592 Delhi THE HINDUSTAN TIMES
in English 19 Feb 92 p 13

[K. Subrahmanyam Article: "Nuclear Deterrent is Cheaper"]

[Text] It needs no astrologer to predict that the defence allocations in the forthcoming budget will register a fall in real terms taking into account the decline in the value of the rupee and the inflation. No one with a realistic view of our economic situation can find fault with that either. The nation and the Services have to learn to live with a progressively decreasing allocation for defence till such time when our economy turns the corner. At the same time it has to be recognised that our immediate security environment continues to cause concern in spite of overall improvement in the international security climate. As of writing this we face a confrontational situation on the line of control in Jammu and Kashmir and Pakistan has admitted that it is in possession of nuclear weapons, the sole justification for which is their

animosity towards this country. We are also moving into a situation in which it may be increasingly difficult for this country to obtain sophisticated weaponry of its choice and need from industrialised countries because of the additional restraints likely to be imposed. The internal turbulences in India are likely to be further fuelled by ethnicity based nationalism unleashed by developments in the erstwhile Soviet Union, Yugoslavia and Eastern Europe and this in turn is likely to call for expansion of our para-military and Central police forces and intelligence services. The solution to this highly complex set of problems of coexisting peacefully with a nuclear Pakistan, dealing effectively with ongoing insurgencies, nipping in the bud any burgeoning fissiparous tendencies, providing for further long-term armament needs of the country and accomplishing all these tasks within a reduced defence outlay is not the task for an overburdened Finance Minister or Defence Minister alone but for the Government as a whole. Unfortunately, in the absence of a National Security Council set-up our Government does not have the appropriate machinery to do the comprehensive staff work for this exceedingly complicated task.

Against this background, one can attempt to outline the broad parameters of a strategy that would meet the imperatives of our current security situation and economic crunch. They are the following: (i) In view of Pakistani admission of having acquired nuclear weapons India must develop, without any publicity, a minimum deterrent arsenal. That would not be very costly as people who have not done any worthwhile calculations proclaim. In fact it could be accommodated within the current budget levels by suitable reallocation. (ii) Our R&D [Research and Development] should be strengthened further and our Arjun, LCA [Light Combat Aircraft], Agni and other missile programmes should be accelerated. Those who advocate scrapping Arjun and LCA programmes are wittingly or unwittingly making this country's security a hostage to Western arms exporters. (iii) Our intelligence and paramilitary forces must be expanded. An integrated manpower policy in respect of paramilitary forces and the army has been proposed by Mr Arun Singh. That proposal must be implemented. Similarly he has suggested integrating, streamlining and regionalising central police force. The first policy would save money on the pension costs for exservicemen. (iv) Our ordnance factories should be reorganised. Factories making stores that can be produced by civil sector should be privatised. There should be much greater interaction between civil sector including private sector and the ordnance factories. The ordnance factories should diversify their production lines to ensure full capacity utilisation and optimal productivity of the work-force. The same applies to public sector units. The aero-space and electronic units should be made into a separate department to concentrate on development and production of missiles, aircraft and high-tech electronic items. The present department of defence production

is too unwieldy. (v) Manpower in the armed forces has to be reduced. Barring some experimentation in 1986-88 various Army organisations are essentially those inherited from the Second World War. In the rest of the world, organisational reforms have been carried out taking into account the increased fire-power, mobility and communication capabilities. A high-powered professional panel is required to evaluate how much the manpower can be reduced without in anyway impairing the combat effectiveness of units.

Further if Mr Arun Singh's suggestion of recruiting initially to the para-military and central police forces and deputing those men for three-year service in the Army is accepted there will be some reserve trained manpower available in case of emergency. Taking into account the international security environment and our improving relations with China, serious consideration should be given to cut back on the Army manpower. Force multipliers to step up the effectiveness of the Army should be procured and this must be the Central thrust of our effort in the next few years. (vi) Our naval plans may have to be reviewed to adjust the future naval expenditure within our budgetary constraints for the next few years till our economic growth accelerates and we are out of the woods. (vii) Thai Air Force's combat and airlift effectiveness should be left untouched while inhouse economies should be explored. Ways and means should be found to augment the Air Force effectiveness with force multipliers. (viii) The border with Pakistan should be sealed except for authorised transit routes. Mining, vegetation-free fire zone, technological devices to warn of border crossing and night vision devices will have to be used on a large scale. The Government should have the political will to crackdown ruthlessly on border smuggling and narcotics trade. There is far more interaction between these factors and Pakistani capability to conduct a low-intensity conflict than is generally admitted in public.

These are only illustrative. There are of course a number of ways in which wastages can be reduced but that is not a problem specific to Armed Forces, but the Government of this country as a whole. The biggest factors contributing to wastage in economy are corruption (both political and bureaucratic); incompetence and inefficiency. Whoever has calculated the economic and social costs of holidays to mourn unlamented leaders, political bandhs, obscenely large Cabinets, delays in decision-making, lack of accountability, late running of aircraft, trains and buses?

But of twin threats India faces from the North and the West, in the present circumstances the threat from the North appears to be manageable. If India were to cut manpower equivalent of some four to five divisions of the Army unilaterally that, along with cuts in real terms in our defence budget in the last three years, will be a powerful arguments in the international forums. This can be done without undue risk if India were to exercise the nuclear option. that would reduce significantly the probability of Indo-Pakistan war. Given India's equipment superiority such reduction in manpower will not

increase the vulnerability of this country. Once India and Pakistan accept each other's nuclear status and a situation of mutual deterrence exists, it should also be possible to embark upon negotiations for mutual confidence-building measures and conventional arms reductions either on a mutually agreed basis or on unilateral reduction on one side compelling a similar reduction on the other side.

The usual argument against this sensible course of action is that it will trigger off a nuclear arms race and India cannot afford it. Such an argument has largely been borrowed from the Western pundits who mindlessly formulated strategic doctrines which led to building up arsenals of sizes which now pose very grave problems in reducing them safely and disposing of the fissile materials from them. The Western strategists are the last people whose advice should be sought or accepted.

They generally assume that the rest of the world would also commit their stupendous blunders in respect of nuclear strategy. It is most unlikely that India or even Pakistan will indulge in the follies of the Western and Soviet strategists. Already Dr Homi Bhabha showed to the world that by reversing the sequence followed in the West, India can have nuclear weapons capability at negligible cost. Instead of spending billions of rupees to develop the first prototype of the bomb (even China spent some two to four billion US dollars) India derived its capability as a spin-off from its civil nuclear programme.

It is enough if India were to develop a minimum deterrent arsenal of a few scores of weapons and appropriate survivable mobile delivery systems irrespective of what Pakistan or China possess. The world has come around to the view that a nuclear war cannot be fought and won. No one today believes in the spurious doctrines of counter-force, nuclear war fighting and worse still of trying to destroy the fabric of adversary's society. Such exotic doctrines of Western strategists were rationalisations for continuous production of successive generations of warheads running into tens of thousands. A war involving use of such arsenals also needed an extremely expensive multi-redundant command and control, communication and intelligence systems. All these are not needed for exercise of simple deterrence without contemplating the criminal folly of fighting a nuclear war. Neither China nor Pakistan will consider it worthwhile to fight a war with India for any objective conceivable in the present context which will involve loss of even a few hundred thousand casualties, and two or three cities. Nor will any sane Indian do so. Building up a deterrent for such a limited purpose is not very costly. For a sensible Indian planner with India having a minimum deterrent of a few scores of first generation nuclear warheads and survivable delivery systems to match there is no need to enter into an arms race with any other country. That minimum deterrent can serve our purpose as effectively as anything many times that size can do and therefore why should one waste money on a larger arsenal? One hopes that Pakistan will adopt this policy and consequently there will be no arms race. If they do not and start accumulating a larger arsenal, there is

absolutely no need for India to follow suit. Pakistan can waste its resources and court economic ruin if it chooses to.

Some years ago costing was attempted of the above type of arsenal and it came to about Rs 5,000 crore at the then prevalent prices over a period of 10 years. Now it may be Rs 10,000 crore at current prices perhaps over a period of some seven years since the country had advanced further technologically.

Along with such a policy of defence preparedness India should also launch on a vigorous diplomatic engagement with Pakistan. Already a proposal for a mutual no-first-use agreement has been suggested in this country. Pakistanis now realise that their nuclear weapon-free zone proposal is unimplementable with their possession of nuclear weapon out in the open. General Khalid Mohammed Arif who used to be an important member of the Steering Committee for the Pakistani bomb project has conceded in an article in DAWN (Feb. 3, 1992) that "prevailing realities indicate that the proposal of a nuclear-free South Asia has been overtaken by time. There is a need now to discuss a proposal for creating a nuclear weapon-safe South Asia. This would be a pragmatic approach to prevent nuclear blackmail in the subcontinent." In other words, Pakistan is likely to be in a receptive mood to discuss a mutual no-first-use agreement.

Once Pakistan has got recognition as a nuclear weapon power and thereby its hankering after equality with India is satisfied, it might settle down to negotiate mutual arms reduction. The economic compulsions on Pakistan is more severe than on India and they would also know that a war is unthinkable. Therefore controlling defence expenditure and at the same time obtaining optimum security are feasible if India stops its policy of drift and starts formulating a pragmatic policy framework uninfluenced by wisdom from Western nuclear strategists who have brought the world to the present situation of uncontrolled proliferation, following the breakdown of the Soviet Union.

Nuclear Energy Chief on Reactors, Other Matters

92WP0156A Madras *THE HINDU* in English
25 Jan 92 p 4

[Excerpts] Madras, 24 January—The Atomic Energy Regulation Board, which deals with the safety aspects of nuclear installations in the country, must regularly publish the data on radiation emissions from atomic power stations, according to Mr. M.R. Srinivasan, Adviser, Energy and Environment, International Atomic Energy Agency.

In an interview here, he said the data were being maintained and were available as documents. Some mechanisms to make the information available widely would be welcome.

He said even when he was the Chairman of the Atomic Energy Commission, steps had been taken to introduce transparency with regard to the developments in the field of nuclear energy and hoped the trend would be maintained. At the international level, it had been generally agreed that greater transparency would improve public acceptability of the nuclear option. [passage omitted]

Nothing wrong in importing n-reactors: Asked about his recent remarks on seeking French collaboration for the proposed nuclear plant at Koodankulam in Tamil Nadu, which was to be put up by the erstwhile Soviet Union, Mr. Srinivasan said when the southern States faced enormous power shortage and had difficulties in getting coal supplies, there was nothing wrong in considering the option of importing nuclear reactors from countries which had expertise and proven technologies, and thus have the power stations installed within a shorter period. It did not mean that efforts to develop indigenous capabilities should be given up. It must progress side by side. After all, rice and wheat were imported at times of shortage.

On conditions that were likely to be imposed if French assistance was sought, he said during informal discussions when he was the Chairman of the Atomic Energy Commission, the French had said India should accept safeguards on the reactors they would build in India. But they did not insist on India's acceptance of full scope safeguards or signing of the NPT [Nuclear Non-Proliferation Treaty].

The French had offered to build two reactors of 1,000 MW capacity each, which would use enriched uranium as fuel and light water as coolant and moderator. If Koodankulam site was good enough, there could even be four units of 1,000 MW each.

Fast breeder reactors: Asked whether India's efforts to develop fast breeder reactors was right in the context of plentiful availability of natural uranium, Mr. Srinivasan said greater stress should be laid on present generation reactors. The economics of fast reactors have not been tested. They would cost more to generate one unit of electricity than the existing reactors. "I will not today emphasise fast breeder reactors in preference to present day reactors, which used heavy water or light water. Even around the world, there is a slowing down of fast reactor development because of technological problem and the question of economy. In any case, fuel availability for the present line of reactors was abundant and hence the emphasis on fast breeder reactor has to some extent receded," he said.

"Therefore in the Indian context, we should take more steps to deploy the limited resources we have for building present day reactors and getting the optimum output from them. It is a matter of high priority. Fast reactors have a long term interest. But when it is a choice

between long-term and near-term interest, we must clearly look at the near-term interests," Mr. Srinivasan said.

Nuclear Scientist Tells Results of Pokhran Test

92WP0160A Madras *THE HINDU* in English
9 Jan 92 p 6

[Text] Vadodara, 8 January—India's peaceful nuclear explosion (PNE) at Pokhran in the deserts of Rajasthan in 1974 has provided the capability to predict the effects of a PNE in any rock medium for which geophysical properties are known, Dr. R. Chidambaram, Director of the Bhabha Atomic Research Centre, told the Indian Science Congress here.

At that time, the Russians and Americans were maintaining that peaceful nuclear explosions were powerful earth moving techniques and could be used for hydrocarbon stimulation and many other peaceful applications. However, before devising any application, it was important to understand the phenomena resulting from an underground PNE. The Pokhran experiment was carried out for this purpose.

A plutonium device with a yield equivalent to 12,000 tonnes of TNT was placed at 107 metres below the ground in a bed of shale near Pokhran. When the device was detonated, the ground surface rose with a velocity of 20 to 30 metres a second to form a dome, 107 metres in diameter and 34 metres in height. There was no venting of radioactivity.

With computer modelling, it was possible to explain the various phenomena observed, said Dr. Chidambaram. The release of explosive energy vaporised the device material and generated high-temperature, high-pressure gas in the emplacement chamber. This gas expanded against the surrounding rocks and produced shock waves. Calculations showed that this shock vaporised 640 tonnes of rock up to 4.1 metres from the device and melted 2,000 tonnes of rock up to 6.2 metres away.

Congress-I Clarifies Position on Nuclear Arms

92WP0154A Madras *INDIAN EXPRESS* in English
15 Jan 92 p 21

[Text] New Delhi—The Congress(I) made it clear here on Monday that India was pursuing a peaceful nuclear programme and would not give in to pressure on the question of signing the nuclear non-proliferation treaty.

Announcing this here, Congress(I) spokesman Prof. C.P. Thakur said, "We'd like to make it clear that the nuclear question has ceased to be a regional issue. It has to be handled in the larger international context on an equitable basis."

People the world over, Prof. Thakur said, should have no doubt about India's "consistent, firm and transparent"

position on the subject, though "we respect the views of the friends of India as also of those championing nuclear non-proliferation."

As far as Indo-Pak relations were concerned, the Congress(I) leader said it should be left to the best wisdom of the leaders of the two countries. This should be done "bilaterally" in accordance with the Simla agreement, without the interference of third parties, he said.

Prof. Thakur said he welcomed U.S. President George Bush's interest in Asia and hoped that the American President would give development in South Asia the priority it deserved.

The Congress(I) leader expressed concern over attempts by some political parties to create "political fetters" in the smooth and speedy implementation of the economic package. Prof. Thakur regretted such attempts were being made despite a national consensus on the issue.

He denied reports that a section of the Congress(I) was also involved in these attempts. An economically bankrupt country could not have political clout in the international arena, he said.

The Congress(I) leader urged the government to ensure that the economic reform package had a "human" face.

Prof. Thakur appealed to the Non-Resident Indians to "join in the process of reviving the Indian economy" and said the ruling party did not expect the NRIs to be "philanthropists" but respond to the attractive package of the government which offered them a good rate of return.

IRAN

Official Defends Need for Nuclear Power Plants

Desires Bushehr Project Completion

*LD2602164592 Tehran IRNA in English 1526 GMT
26 Feb 92*

[Text] Vienna, Feb. 26, IRNA—Iran needs to build nuclear power plants solely for the purpose of generating electricity of which there is a chronic shortage in the country.

The Vice President of the Islamic Republic Reza Amrollahi who also heads Iran's Atomic Energy Organization [IAEO] made the remarks at a press conference Wednesday at the Vienna International Centre.

Amrollahi pointed out that power cuts of 2-3 hours was a regular feature of life in Iran and that nuclear electricity plants could provide about 10-20 percent of its energy needs.

"We would like to complete the Bushehr project as soon as possible", said Amrollahi. Work on the project, the plan for which was initiated about 16 years ago, had reached the stage when 80 and 65-70 percent of the first

and second units respectively had been completed. The Germans, who were the contractors should finish the Bushehr plant, which has cost Iran 4 billion U.S. dollars, said Amrollahi.

In a statement Amrollahi said that the Bushehr plant is an outstanding example of the peaceful application of nuclear energy. It has been designed and shall be operated solely for generating electrical power.

The IAEA [International Atomic Energy Agency] team that visited Iran early this month were much impressed by the plant's safety aspects and the high construction standard. They were equally impressed by the storage facilities and maintenance of plant components and systems.

"...Technically and financially we do not foresee any problems to complete this plant. The only obstacles are political and proliferation considerations which we hope the recent IAEA mission has helped alleviate", Amrollahi said.

He noted with regret the adverse publicity directed at Iran's nuclear activities. In order to prove to the international community that such publicity was without foundation the agency was invited to send a team "to visit wherever and whatever they wished and talk to anyone they required".

The Director General of IAEA Hans Blix acknowledged at the governing board meeting Monday that "great openness was shown and the team found the activities in all these sites to be consistent with the peaceful applications of nuclear energy".

Responding to a question about the sale of a reactor by India, Amrollahi said that India had also offered it for sale to other countries. "However, Iran had not a made decision about it".

Asked about an offer by Argentina, Amrollahi said that "so far we have had no official communication from them. We shall, of course, decide in the future".

The permanent representative of Iran to the IAEA Mohammad Sadeq Ayatollahi told journalists that in terms of the safeguards agreement with the agency routine inspections of materials and installations in Iran took place every year.

The recent agency mission, he said was different. "We invited them to go anywhere they wanted. They also visited the recreation centre near Mo'alleem Kalayeh to see for themselves because mischievous media publicity had described it as an "enrichment centre", added Ayatollahi.

The Vice-President and the President of the IAEO Amrollahi is attending the current session of IAEA's governing board of which Iran is a member.

Denies Recruiting CIS Experts

*AU2702121692 Vienna DER STANDARD in German
27 Feb 92 p 3*

["PLO" report: "Iran Again Denies Possession of Nuclear Weapons"]

[Text] Vienna—Bitterly complaining about an international media campaign against his country, on Wednesday [26 February] Iranian Vice President Reza Amrollahi again denied that Iran is building or possesses any nuclear weapons.

On the fringes of the meeting of the IAEA [International Atomic Energy Agency] Governors Council in Vienna, Amrollahi said that the Iranian nuclear program serves exclusively civilian purposes. Tehran is also not trying to recruit nuclear experts from the former USSR. Since these scientists need an exit permit from their country, it is impossible to recruit them. Amrollahi asked, "Does anybody know whether permits have been issued to experts?"

Iran is working intensively to finish the two 1,300-megawatt reactors of the Bushehr nuclear power plant, in which more than 40 billion schillings have been invested. His country is urging the German Siemens AG to finish the Bushehr nuclear power plant quickly. Construction of the facility was started in the 1970's, but was interrupted after the Islamic revolution in 1979.

At the beginning of February, during a visit to nuclear research facilities in Iran at the invitation of the Iranian nuclear authority, IAEA experts did not find any indication that the country is working on nuclear weapons. However, this applies only to the facilities they visited and to the specific times of the visit.

IRAQ**Government Hiring Russian Nuclear Experts**

*AU0203170892 Dresden MORGENPOST AM
SONNTAG in German 1 Mar 92 p 2*

[Unattributed report: "Exclusive: Roaring Business Exposed in Berlin; Proof: Saddam Sends for Russian Nuclear Scientists"]

[Text] In the Berlin-Schoenefeld Airport restaurant, two inconspicuous men are waiting for their connecting flight. They are Russians who have come on the scheduled Aeroflot flight from Moscow and want to go to Baghdad by indirect routes. They are not common men: Yegor B, 38, is a laser specialist from the "closed town" of Arzamas-16 in the southern Urals, and Viktor B., 40, is a designer of multiple nuclear warheads from a nuclear bomb plant near Dnepropetrovsk. Saddam Husayn has sent for them—for \$10,000 a month, a "roaring business."

"Right now, we have five-year contracts," the two arms experts tell our reporter. They heard of the Iraqi offer

through former colleagues who are already working for Saddam Husayn. According to the two scientists, about 50 are already employed in a research center near Baghdad—apparently in full view of the UN commission which is supposed to control the destruction of all weapons of mass destruction in Iraq. Apparently the two Russians do not have scruples about working for the Iraqi dictator. "Are we supposed to expose ourselves to terrible economic misery?" is their reply. "At the end we had a monthly income of DM [Deutsche mark] 80. A family cannot live on this after prices have been freed," they say in defending their decision to go to Baghdad for \$10,000 per month. There they are to work in a "military complex." They have not yet been told exactly what they are supposed to do, but "we are hoping very much that we will be able to continue to work in our specialties," the men say. It is possible to build a nuclear bomb within a few years, and only a few grams of plutonium are required. It is also easy to procure the highly dangerous bomb material, they say. "Currently everything can be bought in our country, everything you want: people, plutonium, or just passports," the two Russians say. They bought their passports for \$1,000 each. Like them, many scientists want to leave the former Soviet Union. "Those who offer something also have a chance," the two experts believe. Apparently they are not referring only to Saddam Husayn. "At Moscow airport we happened to meet some colleagues from the weapons industry. They were on their way to Israel," Yegor and Viktor say with a shrug, shortly before they continue their flight.

Israeli General Baraq's Remarks on Weapons 'Lies'

*JN0503190192 Baghdad Republic of Iraq Radio
Network in Arabic 1720 GMT 5 Mar 92*

[Commentary carried within the "Spotlight on the News" program—read by Ra'id Ahmad]

[Excerpt] The announcement today by General Ehud Baraq, Zionist chief of staff, that Iraq possesses hundreds of long-range missiles and thousands of chemical warheads was not a coincidence. The Zionists want to continue the campaign of slander and lies against Iraq.

In an interview with the Zionist Army magazine BAM-AHANE published today, Thursday, the Zionist military official said: There will be no peace whatsoever between Israel and its neighbors as long as President Saddam Husayn remains in power.

It is not strange for the Zionists to make such rancorous utterances against Iraq. Past events proved that the Zionist entity designed plots against Iraq and that the Zionist entity fully participated in the U.S.-led 30-state aggression against the Iraqi people whether in preparations for the aggression or in the bestial military attack that targeted Iraq's awakening and its cultural, economic, and scientific pillars.

The Zionist chief of staff's slanders fall within the framework of a new campaign instigated by the U.S. Administration and its allies against Iraq. Meanwhile, world public opinion condemns the unjust blockade imposed on the Iraqi people and calls for breaking this unjust blockade which no longer has any legal justification.

It has become clear that the Americans and their Atlantic and Zionist allies state lies and accusations against Iraq whenever there are signs of the alleviation of the blockade against Iraq due to the intensified international pressure and the disappearance of all excuses and pretexts used by the aggressors to justify their blockade and aggression against Iraq.

The new lies launched by the Zionist chief of staff come at a time when a high-ranking Iraqi delegation is getting ready to go to New York to discuss the blockade at the Security Council.

What exposes the falsehood of the Zionist allegations and slander is the fact that the international inspection teams which visited Iraq recently affirmed more than once that Iraq does not possess any kind of weapon of mass destruction and that Iraq demonstrated its full cooperation in implementing the paragraphs of Security Council Resolution 687 on the destruction of strategic weapons. The International Atomic Energy Agency officially affirmed that the 10th nuclear inspection team has not found any evidence of new activities relating to Iraq's nuclear program. [passage omitted]

Allegations of Hired Nuclear Experts Reported

JN0503142592 Baghdad BABIL in Arabic 2 Mar 92 p 1

[Text] As part of the hired media campaigns against Iraq, the German newspaper MORGENPOST AM SONNTAG says that Iraq is now employing nuclear experts from the former Soviet Union.

It is obvious that the purpose of this campaign is to mislead public opinion to cover up for the crime of the blockade imposed on the Iraqi people. Has the paper not asked itself: Would it not be better for Iraq to purchase medicines instead of employing nuclear weapon experts?

PAKISTAN

Minister Briefs House on French Nuclear Talks

BK0503143492 Islamabad PTV Television Network in English 1400 GMT 5 Mar 92

[Text] The National Assembly was today informed that the talks on the purchase of a nuclear power plant from France are progressing and only the issue of price remains to be settled. Replying to a supplementary question during the question hour, the minister for parliamentary affairs, Chaudhary Amir Hussain, told the house if the price of the French power plant is higher than the ones available in international market, the

purchase will be made from elsewhere. If it so happens, the compensation would be paid to Pakistan by France.

The minister of state for communications, Mr. Azam Khan Hoti, informed the house that there will be no change in the design of the Indus Highway from Karachi to Peshawar. Mr. Azam Khan Hoti made the statement while opposing an adjourned motion sought to be moved by Maulana Akbar Ali of JUI [Jamiat-i-Ulema-i-Islam] regarding the design of the Indus Highway. He said on completion of the Indus Highway the distance between Karachi and Peshawar would be reduced by 350 km. The assembly has now adjourned sine die.

Czechs To Sell 300 T-72 Soviet Tanks

92AS0585Z Peshawar THE FRONTIER POST in English 1 Feb 92 p 1

[Text] Prague (AFP)—The Czechoslovak arms export firm Unimpex has been negotiating with Pakistan for the sale of 300 T-72 tanks worth nearly 200 million dollars the magazine RESPEKT reported on Thursday.

The Soviet tanks, built under licence by the Slovak company ZTS Martin are to be delivered to Pakistan by a Swiss firm, Evair Associate and Simon AG, the report said.

The draft contract also includes the supply of ammunition for the T-72 tanks and a possible future sale to the Pakistan Army of 200 used T-55 tanks which the Czechoslovak Army has cut from its arsenal as part of conventional arms reductions in Europe.

The contract describes the used tanks as being in "good condition."

The possibility of arms sales to Pakistan was discussed during a visit to Islamabad last November by Czechoslovak Prime Minister Marian Calfa.

Calfa was accompanied by 36 businessmen, about one-third of whom were arms specialists, RESPEKT said. Included in the delegation was the managing director of ZTS Martin.

The magazine also said that Prague was negotiating with Iran for the sale of three Tamara MSC-90 electronic systems used in the detection of fighter planes.

Built by the Tesla firm in Pardubice, the systems cost between 14 and 20 million dollars each.

Telecommunications Agreement Signed With Iran

BK0103000192 Islamabad PTV Television Network in English 1400 GMT 29 Feb 92

[Text] In Islamabad, Pakistan and Iran today signed a memorandum of understanding for cooperation in the field of telecommunication. The memorandum was agreed following talks between officials of the Pakistan Telecommunication Corporation and Iranian Telecommunication delegation headed by Mr. Mahmud Khushravi. Both sides

have agreed to improve and expand the existing telecommunication services between the two countries and open 12 additional two-way circuits by a satellite. Fourteen microwave circuits already exist between the two countries on the Quetta-Zahidan microwave route. Both sides also agreed to cooperate in the fields of research and training for maintenance of telecommunication systems.

Kazakhstan To Cooperate in Nuclear Technology

*BK2902095992 Peshawar THE FRONTIER POST
in English 29 Feb 92 p 1*

[By Munir Ahmed]

[Text] Lahore—Kazakhstan, a new Muslim state of Central Asia, is ready to cooperate with Pakistan in the field of nuclear technology as it is convinced that Islamabad's nuclear programme was peaceful and aimed at overcoming energy crisis.

This was disclosed by Mian Abdul Wahid, MNA [member of National Assembly] and former ambassador to West Germany, during a chat with THE FRONTIER POST on Thursday [27 February]. Mian Abdul Wahid along with other nine highranking officials and politicians, recently visited Kazakhstan and signed various agreements with it.

To a question, he said that Kazakhstan's population was over 17 million and its area was more than that of India. Half of the population of Kazakhstan was Muslim and almost all politicians were keen to improve bilateral trade ties with Pakistan.

Mian Abdul Wahid said that Pakistan has opened its embassy in Kazakhstan and Khalid Khattak has been appointed as consul general there. Only two other countries, Iran and America—has so far opened embassies in Kazakhstan.

He maintained that the government of Kazakhstan wanted to destroy all nuclear devices. At present Kazakhstan has more than 100 atomic bombs and other weapons.

Abdul Wahid claimed that Kazakhstan was ready to extend all possible co-operation to Pakistan in the field of nuclear technology for peaceful purposes.

In response to another question, he said that Kazakhstan Government was currently engaged in strengthening efforts to ensure the formation of former USSR's newly independent states. He said that Kazakhstan was rich in natural resources and needed Islamabad's cooperation in establishment of consumer goods industry.

Mian Abdul Wahid said that Kazakhstan had so far signed agreements with Pakistan in the fields of science and technology, trade, culture and sports. A cultural delegation from Kazakhstan would soon visit Pakistan and vice versa.

Kazakhstan Reported To Sell Nuclear Arms

*92AS0585V Peshawar THE FRONTIER POST
in English 24 Jan 92 p 1*

[Article by Altaf Siddiqui]

[Text] Karachi—Chief of the Jamhoori Watan Party, Nawab Akbar Khan Bugti has expressed the fear that deteriorating economic situation of the Central Asian Republics could even force them to sell their nuclear devices to meet the situation. Talking to newsmen at his residence here, he referred to the visit of federal minister Sardar Asif Ali Khan to the Central Asian Republics and said that possibility of such a deal with Pakistan could both be ruled out. [sentence as published]

The former Balochistan chief minister said that the newly-born republics had nuclear devices, but economically they were bankrupt. So in desperation they could sell these devices to meet their economic requirements. He said that when the minister visited Kazakhstan, it asked for 300 million dollars worth of aid to meet its economic needs. One of the businessmen, a drug manufacturer, who accompanied the minister offered that he could provide such aid. Bugti speculated that most likely a deal on a nuclear device might have been struck.

He said that the republics were in a state of economic crisis and under these circumstances the nuclear weapons could be transferred to anywhere. This was also a fear that was disturbing the Western countries.

Regarding the U.S. pressure on Pakistan in respect of its nuclear programme, Bugti said that the question was not of how we should act but to what extent we could resist the pressure. He said that since the very inception of Pakistan, the rulers had made the country a U.S. lacky and they would again bow down before the pressure. He said that since the entire country was a U.S. base, the question of there being any U.S. bases in Pakistan did not arise.

Country Not To Transfer Nuclear Technology

*OW2002145992 Beijing XINHUA in English
1437 GMT 20 Feb 92*

[Text] Islamabad, February 20 (XINHUA)—Pakistan will not transfer sensitive nuclear technology to a third country, State Minister for Foreign Affairs Mohammad Siddique Kanjoo said.

Talking to newsmen here in the parliament house today, the minister said Pakistan has "acquired certain technical capability in the nuclear field, but a political decision has been made at the highest level to use this capability only for peaceful purposes."

"Pakistan does not possess a nuclear explosive device, is not producing nuclear weapons nor has any intention to make one," the minister stressed.

In consonance with its commitment to nuclear non-proliferation, he added, "Pakistan will also not transfer sensitive nuclear technology to third countries."

"Pakistan's nuclear program is entirely peaceful in character and is not weapon-oriented," the minister said. "We remain firmly committed to the objective of nuclear non-proliferation and are willing to accept any non-discriminative regional regime for keeping South Asia free of nuclear weapons."

The minister reaffirmed Pakistan's principled stance and called upon India to respond positively to the proposals initiated by Pakistan to keep South Asia free from nuclear weapons.

Pakistan proposed establishing a nuclear-weapon-free zone in South Asia and suggested that Pakistan and India issue a joint declaration as the first step renouncing the acquisition or manufacture of nuclear weapons.

It also proposed that an agreement be reached between India and Pakistan on a system of bilateral inspection of all nuclear facilities on a reciprocal basis and simultaneous acceptance of International Atomic Energy Agency (IAEA) safeguards by the two countries on all nuclear facilities.

It expressed its readiness to accede to the nuclear non-proliferation treaty simultaneously with India and proposed the conclusion of a bilateral or regional nuclear test ban treaty.

Of late Pakistan proposed five-nation consultations involving China, the U.S., the Soviet Union (now Russia), Pakistan and India to ensure nuclear non-proliferation in the region.

The minister hoped that India, in the interest of peace and progress in the South Asian region, will respond positively to the above-said proposals of Pakistan so that South Asia is saved from the specter of nuclear weapons and the regional countries can devote themselves to the gigantic task of economic development raising the standard of living of their peoples.

'Apologetic Attitude' on Nuclear Policy Criticized

BK0303032592 Peshawar *THE FRONTIER POST*
in English 2 Mar 92 p 8

[Text] Qazi Hussain Ahmad, amir Jamaat-i-Islami [JI] has lashed out at IJI government's apologetic attitude on nuclear capability and warned that his party would never allow anybody to strike a compromise on the matter.

Addressing a rally arranged by JI's Passban wing in the course of its "Down With America" campaign, on Sunday, he said that a top official had conceded to the United States "our resolve on achieving nuclear capability". He said that

IJI's formation was based on such points as continuation of atomic programme assisting the Kashmir and Afghan Mojahidin and enforcement of Islamic system.

Criticising the prime minister's stance to let Kashmir become a separate state. Qazi said that there was no provision for an independent state of Kashmir in the UN resolution. Nawaz Sharif, he alleged was in hatching a conspiracy at the behest of American government but "we will frustrate such moves."

IJI, he argued, had started working against its basic principles by giving up its insistence on an Islamic system, showing un-Islamic programmes on electronic media, conspiring against Pakistan's nuclear policy and acceding to the UN plan on Afghanistan.

He asserted that IJI government could not endure without following its original line. "We will initiate the same movement against America as we had against the Soviet Union," he vowed and added that people used to laugh at JI's slogan of destroying USSR but the mission was accomplished "Now America will undergo the same process of disintegration," he predicted.

He said the independence of the Central Asian states was an indicator of the fact that the day was fast approaching when there would be no borders in the region from Pakistan to Mongolia. He said the Americans claimed to be powerful enough to decide the fate of the entire world but this dream would never come true. American did not want friendship between Pakistan and the rest of the Islamic forces of the region but this too would be frustrated and there would emerge a strong Muslim power in this region, he said.

The rally also staged a mock explosion of the Islamic bomb the model of which it carried with it.

SYRIA

TV on Arab Nonconventional Weapons

92P40128Z Tel Aviv DAVAR in Hebrew
5 Feb 92 pp 1-2

[Excerpt] Syrian Foreign Minister Faruq al-Shar', at a conference of nonaligned foreign ministers in Larnaca, said yesterday that the Arabs will not accept American proposals on arms control in the Middle East. In his words, the proposals tilt toward Israel and harm vital security interests for the Arabs. He demanded that Israel first dismantle its nuclear weapons in the framework of each arms control initiative.

In his speech, Faruq al-Shar' attacked Western countries as a whole because of their support for Israel's acquisition of nonconventional weapons of every type while the Arabs are still prevented from arming themselves with weapons of mass destruction. He claimed that the Arabs need weapons for purposes of self-defense. Al-Shar' said it is inconceivable that the West can allow Israel to be

armed with nonconventional weapons while at the same time Israel is settling in the territories and refuses to withdraw from them.

Similarly, Syrian commentators said yesterday that the Arabs will not sit idly by while nuclear weapons are in Israel's hands. Syrian television commentator Yahya al-'Aridi said that "Israel is not the only country which

has nonconventional weapons" and that it should be cautious in this regard when carrying out a policy of force toward the Arabs. He pointed out that the borders Israel determined for itself following the Six-Day War, which it considers to be secure, will not be immune to missiles in the hands of the Arabs. If war breaks out in the future, it will be more destructive than all past wars. [passage omitted]

Urals Scientists Work With China on Technology

LD2102212992 Moscow *POSTFACTUM* in English
1444 GMT 21 Feb 92

[From the "External Economic Relations" section]

[Text] Yekaterinburg—The government of China has earmarked 1 billion yuans for a zone of high and highest technologies to be created in Harbin jointly with the Urals branch of the Russian Academy of Sciences (URBRAS). Head of the URBRAS international scientific relations administration Anatoliy Kozlov also told PF [POSTFACTUM] on February 21 that the Urals scientists' contribution will, for some time, be purely intellectual. The visit by the Urals scientists to Harbin that resulted in signing the agreement on creating a zone of high and highest technologies ended on February 20. The agreement stipulates that the academy institutes be granted full freedom in using and implementing scientific projects. The agreement is to be approved at the session of the URBRAS presidium where the details of mutual relations are to be specified.

'Enriched' Uranium Sales Reports Discounted

LD2702234892 Moscow *Teleradiokompaniya*
Ostankino Television First Program Network
in Russian 1800 GMT 27 Feb 92

[From the "Novosti" newscast]

[Text] Our Bonn correspondent reported yesterday on the sale of a consignment of Russian uranium in the West. Today there is fresh confirmation of this from Paris. Our correspondent attempted to obtain a videotape with the details of the deal. Here is a report by Sergey Iyezuitov, who we contacted by telephone:

[Iyezuitov] CCV [expansion unknown], a private firm which owns the videotape showing the sale of enriched uranium, is based in a Paris suburb, Boulogne-Billancourt. Mr. Brenot, who this morning promised to show us the tape, did not come to the meeting arranged for 1530. Instead I spoke to his female assistant.

The contract, it transpired, stipulated conditions for filming. To be precise, the tape was not to be shown on Russian. This was out of consideration for the safety of the journalists who prepared the report. At the very least we wanted to film the tape editing room and the people who had worked on the tape, but I was given a polite but firm refusal. Once again, the reason given was safety, this time the safety of CCV staff working in the Paris suburb.

One other detail is that Mr. Brenot's assistant recalled that the tape had been purchased by the third channel of French television and would be included in a program to be screened on 11 March. You can record it yourselves, I was told as I was leaving, but we advise you not to show it in Russia.

I have just spoken to Channel Three, but at the moment it is impossible to get down to brass tacks. Originally everybody was prepared to help, but for some reason, nobody can give a sensible reply once they discover that Russia is interested in the material. [Video cuts to reporter Yegorov interviewing Y.I. Ignatenko, public relations spokesman for the Ministry of Atomic Power, and A.N. Chuvin, deputy director general of the Tekhsnabeksport foreign trade association.]

[Begin recording] [Yegorov] How do you react to the report that a consignment of enriched uranium from Russia was sold via Austria to third countries?

[Ignatenko] I regard it as yet another provocation connected with the struggle for markets. There is no possibility of this uranium—uranium with enriched isotopes—having been sold by enterprises in the Russian Federation.

[Chuvin] Any partner who receives material from us must give an assurance at government level that the material we send will be used for peaceful purposes.

[Yegorov] Is there any possibility of Tekhsnabeksport being circumvented when a contract is concluded?

[Chuvin] An official contract of such a kind is not possible.

[Yegorov] Could this consignment of uranium have been stolen from somewhere?

[Chuvin] All this material is kept in special places which are guarded. A special inventory is kept. When despatched, consignments of any material are transported in special railway trucks, under guard.

[Ignatenko] An inventory, down to every last milligram, is kept of enriched uranium, even that which is used in fuel assemblies at nuclear power stations. In principle.... [Recording of interview ends here.] [end recording]

As you can see, everything is in order here. The heads of Russia's nuclear industry do not rule out the possibility that the uranium sales scandal was organized by competitors or firms in France and the United States.

Allegations of Nuclear Scientists to Iraq, Israel

92P50100B Moscow *TRUD* in Russian 3 Mar 92 p 3

[V. Sisnev Washington dispatch: "Nuclear Specialists for Saddam"]

[Text] More than 50 nuclear weapons specialists from the former Soviet Union are now working in Iraq's military scientific-research centers. Thus write Washington newspapers, citing as the source of these alarming reports an interview which two of the "new recruits" gave to Western journalists in the Berlin airport through which they passed en route to Baghdad. They were Yegor Belousov, a specialist in laser equipment who worked in the closed city of Arzamas-16, and Viktor Bakunin, an expert in independently targeted nuclear warheads who has left his "nuclear bomb factory" in Dnepropetrovsk.

In their own words they, like all their colleagues, concluded five-year contracts with Iraqi employers and will be paid ten thousand dollars a month, while at home they were paid the ruble equivalent of fifty dollars.

They also supposedly asserted that not only Saddam Huseyn is recruiting nuclear specialists who have become unnecessary in CIS factories which have cut back on research and production. Belousov and Bakunin told journalists that in Moscow's Sheremetyevo Airport they met several acquaintances from the military-industrial complex who were on their way to Israel.

Commentators are noting that the U.S. state administration promised last month to allot 25 million dollars specifically to help Russia keep nuclear specialists at home. However, judging by everything, this promise from Washington, like its promise of broader humanitarian aid, is still on paper.

Nuclear Experts Leave for Libya, Iran

*AU2502092992 Hamburg DER SPIEGEL in German
24 Feb 92 pp 146-150*

[Excerpts] There are 100,000 Russian nuclear experts struggling for their existence: The average monthly salary in the armament complexes, which have been kept secret until now, is hardly sufficient to buy three kgs of meat. Western support for scientific centers helps only a few. The first nuclear experts have already left for Libya and Iran. [passage omitted]

Before the "cold war" was lost, the 5,000 employees of the arms factory code named "R 64 76" were permitted to answer questions about their place of work only by saying that they worked in a "pochtoviy yashchik," a mailbox. Every Soviet citizen understood and was silent.

Now the company's three managers may identify themselves as the managers of "Nikimt," the "Research and Construction Institute for Assembly Technology" in Moscow's Kirovskiy district. [passage omitted]

"Two or three of my welding experts have received a lucrative offer from the Third World, the director of Nikimt says without being asked. The cage that imprisoned all those who worked for R 64 76 is suddenly wide open: "I will not declare my employees to be people who are in possession of state secrets, thus forcing them to stay. Everybody has the right not to care a pin for their country and to leave." [passage omitted]

Formal permission to leave the country from the head of the new Russian Nuclear Energy Ministry is still missing—President Boris Yeltsin has not yet appointed a new minister. Deputy Minister Viktor Mikhaylov can "understand" the would-be emigrants, but he does not believe "that anybody will really leave." Nuclear weapons, Mikhaylov says, "were and are built by patriots. They are people with a strong sense of responsibility." [passage omitted]

The Americans and Germans have long recognized the potential danger posed by desperate nuclear experts who no longer have any work. Together with the Russian Government they want to establish a technology center. Washington has promised \$25 million, the EC \$50 million. But how many experts can be prevented for how long from selling their knowledge to Third World countries that are greedy for armament?

The fate of 10 top secret nuclear cities, whose codes were derived from the local postal codes, now torments the rulers in the Kremlin like a nightmare. First of all, there is the Chelyabinsk-65 and Chelyabinsk-70 nuclear arms complex in the southern Urals, the nuclear capital of the deceased Soviet Union. The places are not marked on any map even though more than 40,000 people live in each of them. [passage omitted]

According to the calculations of Deputy Nuclear Energy Minister Mikhaylov, a million people currently live in the country's 10 nuclear cities, including 100,000 experts. "They are useful for all nations," Mikhaylov says, "I wonder why Germany is still sleeping."

"The West is not yet aware of how much Soviet society was militarized," Professor Aleksey Yablokov, Boris Yeltsin's personal adviser in the Kremlin. According to his investigations, until the beginning of this year 75 percent of all companies in St. Petersburg and half of all enterprises in Moscow worked mainly for the Armed Forces.

The financial aid from the United States and the EC for a research center will certainly not be sufficient for a turnabout. "We need orders, orders, orders," nuclear energy politician Mikhaylov says and warns: "If a ship moves without someone at the helm, it will run aground."

The first people have already left the Russian ship. Before the end of last year nuclear physicist Igor Cherniyev, 46, from the Dubna nuclear research center near Moscow left for Libya. He had studied at Moscow's Physical-Technological Institute, a cadre forge for nuclear experts and missile builders. He got the contract with al-Qadhdhafi's regime via a Libyan friend, whom he had met by accident many years ago near an aircraft school in Kremenchug in the Ukraine.

He has meanwhile telephoned his sister Anna Georgina and his parents in Moscow three times. He says that, together with another three Russians who in the past used to build pipelines, he is working on a "secret nuclear project." Since Cherniyev was never able to gather practical experience in building the bomb, he will probably not be able to satisfy al-Qadhdhafi's desire for a nuclear bomb in the near future.

The Iranians, who are forging ahead with their nuclear arms plans by importing material from China, are acting more professionally. They use their former consulate in Baku, which is now their embassy in the Republic of Azerbaijan, as a clearing point for hiring frustrated

Russian experts. Russians who are looking for contacts but who have a note in their passport that prohibits them from leaving the country because they are holders of state secrets, have no problem in going to this town, which is close to the border.

After a trip to Baku a man who introduced himself as an interested person visited the DER SPIEGEL office in Moscow last week on his own initiative. He claimed that an employee of the Iranian Embassy had offered him an annual salary of \$60,000 plus \$360,000 compensation for giving up his citizenship. At least one of his colleagues has already been taken across the border to Iran by smugglers in return for 1,000 rubles.

The nuclear physicist, who worked on the intercontinental missiles that were stationed in northern Europe, was supposed to work on neutron spectrography in Iran—indispensable for the production of nuclear weapons. "I would like to build such a bomb," he says. "I would like to know whether I can do what the Germans were unable to do in World War II." [passage omitted]

Deputy Foreign Minister on Arms Trade

Trade Associations Set Up

LD2502104692 Moscow TASS International Service
in Russian 1215 GMT 21 Feb 92

[By ITAR-TASS correspondents Ivan Ivanov, Boris Krivoshey, and Vasily Titov]

[Excerpt] Moscow, 21 Feb (ITAR-TASS)—Asked about arms trade, Petr Aven, Russian first deputy foreign minister, said that the system that existed in the past is changing. Two independent foreign trade associations specializing in arms sales have been established. There are plans to create several other similar structures on the basis of major arms manufacturers. Licenses will continue to be issued by the state, the deputy minister continued. For these aims, in accordance with a decree prepared by the Russian president, a special committee of representatives from some leading ministries headed by the deputy chairman of the government will be established. Petr Aven thinks that this will be a minimally bureaucratic system that will use only the prohibited lists of types of armaments and countries to which arms sales are prohibited. At the same time, UN recommendations on the issue will be fulfilled without fail.

According to Aven, priorities in arms sales are changing in accordance with the changes in political orientation, but there is still no talk today about any cardinal changes that have taken place. This relates to India which, as Petr Aven noted, is our "traditional and long-term partner in military-technical cooperation." Russia has no intentions of changing its attitude on the prospects of this cooperation. Problems that have appeared here recently, according to the deputy minister, are mainly of a financial nature and are connected with unregulated mutual payments and estimates on the size of the debt. Petr Aven is confident that many problems will be solved

during a visit to India by Gennadiy Burbulis, first deputy prime minister of the Russian Federation, which is planned for March-April this year. [passage omitted]

Some Arms Sales Prohibited

LD2502104992 Moscow Radio Rossii Network
in Russian 2100 GMT 21 Feb 92

[Text] Our arms sales abroad have gone down by 40 percent. This was announced on 21 February at a news conference held by Petr Aven, chairman of the Russian external economic relations committee. He noted that the committee will prepare lists of arms prohibited from sale. Russia undertakes not to sell arms to hotspots on the planet and where the United Nations prohibits, said Aven. The chairman said that this year the committee plans to submit to the Russian parliament a draft law on military and technological cooperation between Russia and foreign countries.

Nuclear Scientists' Future Employment Outlined

PM2602160992 Moscow PRAVDA in Russian
21 Feb 92 p 3

[Anatoliy Pokrovskiy report under the "From Authoritative Sources" rubric: "'We Are Not Asking for Handouts,' CIS Nuclear Scientists Believe"]

[Text] The decision made during the talks between Boris Yeltsin and James Baker to set up an international center to support scientists and specialists of the former USSR who were engaged in nuclear weapons production has given rise to conflicting opinions.

The official account of the decision is as follows: The center is to organize the development, selection, funding, and supervision of projects that would be implemented primarily in institutes and institutions located in Russia and other interested CIS states. The United States will take steps to provide \$25 million to set up the center and finance its projects. Germany is guaranteeing support for this initiative by the EC and its member countries.

We asked Professor Viktor Mikhaylov, deputy minister of atomic power engineering and industry in charge of nuclear weapons questions, to comment on this report:

"In order to prevent any misinterpretations, I will say right away that we are not asking for any handouts. It is a matter of partners working together on new technologies. We have many fine brains and we have accomplished a significant body of scientific work. Russia does not have the resources to finance all the ideas, so we need investment. We also need good publicity and the participation of private firms.

"Ye.N. Avrorin, corresponding member of the Russian Academy of Sciences and scientific chief at the all-Union Scientific Research Institute of Technical Physics, and I described to J. Baker possible areas for collaboration during our meeting in Chelyabinsk-70. What we are talking about is new developments in the medical sphere,

relating to eye surgery in particular, the creation of special beds for burns patients, and so on. Topics were outlined involving the development of communications and the use of explosions in a number of technological processes, including obtaining artificial diamonds.

"In the sphere of basic research, scientific cooperation could focus on high-density energy physics, inertial [inertsionnyy] thermonuclear fusion, nuclear power industry safety, algorithms for simulation programs, and so on.

"Of course, nuclear weapons are causing special concern. Both Russia and the United States are significantly reducing their nuclear arsenals and we need to make a joint effort to ensure that weapons do not proliferate worldwide. There is scope for utilizing the two countries' experience in the safe storage and transportation of nuclear weapons.

"In short, the outlined program is pretty extensive and multifaceted. And that is very important—we are expecting the new center to help get our achievements into production. In this connection, I would like to point out that already one nuclear complex employee in three is working in consumer goods production. The task is to have two-thirds of our personnel doing this in the very near future. Such is the rate of conversion in the sector. While all this is going on it is very important not to lose our top-class specialists and to prevent the dreaded brain drain. The center has a major role to play in this respect.

"The plan is to locate it in Troitsk, near Moscow, with branches in Arzamas and Chelyabinsk. The center's scientific council will draw up the final research programs on the basis of proposals from Russian, U.S., and German scientists."

Omsk May Receive License To Sell Arms

*LD2802102692 Moscow POSTFACTUM in English
2114 GMT 27 Feb 92*

[From the "Domestic Market" section]

[Text] Omsk—Reports say Russia's President Boris Yeltsin has promised the Omsk regional administration's head to issue a license allowing the region to sell the output of its local defence-related enterprises. According to a source close to the region's government, if the license is issued, Omsk will obtain the right to establish contacts and sign agreements on the sale of military equipment with any country, with the exception of Iraq and Yugoslavia.

Uranium Enrichment Industry Reorganizing

*MK2702133792 Moscow NEZAVISIMAYA GAZETA
in Russian 27 Feb 92 p 6*

[Report by Oleg Panfilov: "Security: To Whom Will the Uranium Industry's First-born Belong? Americans Officially Asked for Some Uranium To Be Sold to Them"]

[Excerpt] [passage omitted] The Chkalovsk [Tajikistan] uranium plant and similar plants in Taboshar and Adrasman were the first in the USSR to produce natural [prirodnyy] enriched uranium.

The plants at Taboshar enriched the uranium ore until 1971 and produced natural uranium in the form of a uranosouranic oxide [zakis okisi] concentrate until 1967. The Adrasman plant was closed even earlier—in 1959—and a combine producing lead, zinc, copper, and bismuth is now operating there.

Thus, the only production unit enriching and obtaining uranium-238, a black powder—a uranosouranic oxide—was in Chkalovsk. However, the combine, now called the "Vostokredmet" Association, has mines and plants in Uzbekistan and Kazakhstan, and constitutes a mighty uranium extraction complex.

In effect the production unit is under tight control, and there are people on the plant's management who have never visited the workshops. Although uranium enrichment technology differs little from the hydrometallurgical plants that produce rare metals, the special regime has survived in Chkalovsk from the time when it was considered secret. It is only recently, under pressure from residents in nearby villages, that the plant's leadership has been forced to conduct a few tours to dispel rumors about an "underground" plant and nuclear weapons production.

Nevertheless the leaders of the Chkalovsk plant will not say how much is produced, justifying this by saying that this is a commercial secret, but according to unofficial estimates, the annual production of natural uranium is at least 10,000 tonnes. It is still not clear whether Tajikistan has the right to part of the profits because, with the breakup of the USSR, the Ministry of Atomic Power Engineering and Industry no longer exists, although plant management personnel claim that correspondence is still coming from Moscow on the nonexistent ministry's letterheads. Doctor of Technical Sciences Yuriy Nesterov, director of the "Vostokredmet" Association, explains how the gigantic structure of the once powerful Ministry of Atomic Power Engineering and Industry still exists.

[Nesterov] The structure of a new corporation has been set up; it comprises departments from the former Ministry of Atomic Power Engineering and Industry and, inter alia, the "Atomredmetzoloto" concern, which was registered with the Moscow Soviet. It was first thought that the corporation would be an interrepublic body and would involve Turkmenistan, Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, Russia, and Ukraine, as well as Armenia, Lithuania, and Georgia, which have nuclear electric power stations [AES] and a research institute. Thus, the structure would have been preserved with its industrial enterprises, production units assembling fuel elements and fuel rods, scientific establishments, and design [proyektnyy] organizations, including the former Third Directorate of the USSR Ministry of Health

tending to atomic industry personnel. The structure also made provision for a finishing [okonchatelnyy] process—the processing and burial of spent fuel. Needless to say, the corporation's central leadership is to be in Russia, since that is where the main scientific and industrial potential is to be found and where 85 percent of the fuel elements are manufactured. Kazakhstan, for instance, only manufactures 15 percent, and final uranium enrichment, before elements and rods are assembled, is only carried out on Russian territory. None of the former Union republics is capable of producing nuclear fuel today. Unified supervision of safety is needed at AES's, military reactors, and weapons production units. Agreement seems to have been reached on setting up the corporation, but the Russian Government has the final say. Central Asian enterprises have now amalgamated to form a concern. Will we be able to survive? We process fluorine ore to derive a highly pure concentrate and sell it to Russia and Kazakhstan, and without it uranium enrichment is impossible. If ties start to collapse, all enterprises will come to a standstill.

I believe that the unified nuclear fuel cycle must be preserved, but that is not in Russia's interests.

[Panfilov] But will not the corporation dictate terms to other republics that do not have enterprises in the uranium production cycle?

[Nesterov] I do not think so, because Ukraine has no enterprises, but it does have four AES's.

[Panfilov] What states could use your output?

[Nesterov] The United States, Britain, France, China, and maybe Germany.

[Panfilov] What about Muslim states?

[Nesterov] Some reports indicate that Pakistan could.

[Panfilov] Why do you think articles have appeared about the Chkalovsk plant's being involved in selling uranium?

[Nesterov] As for the specific countries that the articles mention, Pakistan can in theory use uranium. Iraq, Iran, and Libya do not have these centers. There are political reasons behind these articles—to spread mistrust in President Nabyev, in us, the Russian-speaking population, to maintain tension in the [Tajik] republic, and to set the East against the West.

[Panfilov] Have representatives of foreign firms approached you with regard to selling uranium?

[Nesterov] There have been offers through nongovernment channels from Americans. In principle we could sell natural uranium to foreign firms. But the point is that since 1971 we have been selling our output via the "Tekhsnabekspost" Association. It protected our interests in terms of duty, freight insurance, and delivery. We could have sold things ourselves, but then the international market would have been disrupted and that would

not only have caused the price of uranium to fall, but would also have resulted in the uncontrolled delivery of uranium to third countries.

The corporation being set up to replace the former Union Ministry of Atomic Power Engineering and Industry will hardly entertain the possibility of freezing or converting a unique production unit, which, despite its apparent openness, nonetheless hides a great deal and will hardly succumb to control from the Tajik Government.

CIS Troops Deny Chemical Weapons Possession

LD2802083792 Moscow TASS in English
0821 GMT 28 Feb 92

[By ITAR-TASS correspondent Roman Zadunajsky]

[Text] Moscow February 28 TASS—Former Soviet troops deployed in Nagorno-Karabakh do not possess a single chemical weapon, a spokesman for the CIS Armed Forces told TASS on Friday [28 February]. He denied "sensational" reports of several mass media that Nagorno-Karabakh might become another Chernobyl as the military possess chemical weapons there.

Churkin Denies Nuclear Scientists in Iraq

OW0203193092 Moscow INTERFAX in English
1612 GMT 2 Mar 92

[Transmitted via KYODO]

[Text] The Information Department Chief of the Russian Foreign Ministry Vitaliy Churkin has said that the declaration made by the Lithuanian Ambassador to the United States Stasis Lozoraitis saying that the Kaliningrad region must belong to Lithuania is provocative. The Ambassador was interviewed by a correspondent of an official newspaper, "Lietuvos Aidas." Speaking in Moscow on March 2 Vitaliy Churkin said the Russian Government expected explanations from Lithuania after one of its officials expressed concern about the "emergence of a Moscow-Bonn axis."

Vitaliy Churkin refuted the statement that over 50 former Soviet nuclear scientists were working in Iraq. He said that none of them had left the country yet and that Russia had never cooperated with Iraq in its nuclear arms programs.

Investigation Continues Into Uranium Sales

LD2902222192 Moscow Teleradiokompaniya
Ostankino Television First Program Network
in Russian 1800 GMT 29 Feb 92

[From the "Novosti" newscast]

[Text] A report on the sale of our enriched uranium abroad broadcast by our Bonn correspondent Vladimir Kondratyev on 26 February was also confirmed by our Paris correspondent. French television plans a special

program on this topic on 11 March. We, for our part, decided to continue the investigation. A Tajik journalist, Oleg Panfilov, has recently returned from Chkalovsk. He was the first of our colleagues to visit a uranium-processing plant. Our information: The main uranium-processing plant is situated in Chkalovsk, 17 km from Khodzhen. Uranium is also produced in Uzbekistan and Kazakhstan.

[Panfilov] I visited a major plant processing uranium ore. It is situated in the northern part of Tajikistan in Chkalovsk where uranium is enriched and where a black powder—the oxide—the so-called Uranium-238 is produced. The Techsnabekspport [Technical Supplies Export] association which arranged the sale of uranium from the Chkalovsk plant, among other plants of the former USSR, is most probably still engaged in the uranium trade. To the best of my knowledge the Chkalovsk plant had been selling natural uranium to the United States for the past five years. They were official deals but were dealt with by the Techsnabekspport association. The United States, Great Britain, France, China, and possibly Germany could have processed the Uranium-238 from Chkalovsk. So, it is very difficult to say to what extent it was possible for Tajikistan to carry out an independent sale of uranium to any other states. Though, in principle, I do not rule this out.

I inquired whether uranium could be sold privately, for example, as it had been reported in the STERN magazine and was published recently by IZVESTIYA. In principle, it became clear to me from my conversation with the plant's managers that uranium could be smuggled from the enterprise, but it is very dangerous to keep it for some time at home.

[Announcer] The Atomenergo [Atomic Energy] ceased to be a powerful supervisory body. Other concerns and associations are currently getting its functions.

[Panfilov] A corporation is being set up which should include Turkmenistan, Kazakhstan, Uzbekistan, and even Lithuania.

'Commercial Objectives' Determine Arms Sales

LD0303194392 Moscow Russian Television Network in Russian 1700 GMT 3 Mar 92

[From the "Vesti" newscast]

[Text] Glaziyev, Russian deputy minister for foreign economic relations, has stated that when selling arms Russia will proceed not from political, but from commercial objectives. Glaziyev named the repayment of the existing debts by Libya, Syria, and Iraq as a prerequisite for resuming arms sales to these countries. Taiwan also was named as a potential importer.

Dumped Chemical Weapons, Contamination Viewed

LD0103171392 Moscow TASS in English 1918 GMT 28 Feb 92

[By ITAR-TASS correspondent Roman Zadunaitskiy]

[Text] Moscow, February 28 TASS—Russian and German scientists will soon estimate the circumstances of dumping captured German chemical weapons and their current state, Chairman of the International Committee for Peace, Disarmament and Ecological Security in Sea and Oceans Justice Major General (retired) Pyotr Barabolya told ITAR-TASS.

After the Second World War, almost 400,000 tonnes of the German Army's ammunition containing war gases (mustard gas, lewisite, phosgene and diphosgene) were dumped in various areas of the Baltic Sea, mainly in shallow water—the Kiel Bay, the Skagerrak Gulf and near the Bornholm Island—under the decision of the allies.

The war gas shells, bombs and reservoirs are going to ruin and becoming depressurized, according to experts' estimations. Approximately between 50,000 and 100,000 tonnes of war gases may get into the water.

"The allies had an erroneous theory that the chemical ammunition will cover up with a thick layer of silt and be preserved," said Barabolya.

"However, the ammunition was dumped in shallow water, currents and heavy gales mix up everything, and the Baltic Sea is boiling like a pot in bad weather. The situation can become threatening any moment."

Head of the CIS Navy Chemical Service Vice Admiral Viktor Skantsev told ITAR-TASS one can now speak only theoretically about the state of the dumped chemical weapons and a possibility of sea water contamination.

It is possible chemical air bombs' cases have already gone to ruin, as they were from three to four millimeter thick in contrast to cases of chemical shells with a thickness of up to 20 millimeters.

Safety Chief on Illegal Uranium Exports

PM0403215192 Moscow IZVESTIYA in Russian 5 Mar 92 Morning Edition p 1

[Andrey Illesh and Valeriy Yakov report: "Illegal Export of Nuclear Materials Not Ruled Out"]

[Text] A news conference was held in the Russian Foreign Ministry Press Center 4 March with the participation of the leadership of the State Committee for the Supervision of Nuclear and Radiation Safety under the Russian Federation president.

In particular, a topic raised in a report in yesterday's IZVESTIYA—the possibility of illegal exports of radioactive materials abroad—was touched upon. In this connection Aleksandr Gutsalov, first deputy chairman of the State Committee for the Supervision of Nuclear and Radiation Safety, answered IZVESTIYA's questions before the start of the news conference.

[Gutsalov] The possibility of selling uranium abroad exists and is governed by export-import terms. There are corresponding international regulations from the International Atomic Energy Agency [IAEA], and they clearly limit the supply of special nuclear material that has been prepared for use as fuel for reactors or that can be used to manufacture nuclear weapons—there are restrictions on this. There are no special restrictions on natural uranium, and so in such a situation it is possible to speak of the decency of people who engage in such business. On the other hand, all the same, any state which extracts uranium, processes it, and uses it must control export and import operations involving it.

[IZVESTIYA] But we are talking of an illegal business, which, of course, is not governed by IAEA documents....

[Gutsalov] Of course, it is possible to circumvent any cordon. But, on the other hand, there is the possibility of determining the presence of radioactive materials in the customs, on the border.

[IZVESTIYA] It is no longer a secret today that there are plenty of breaches on the border, that the customs are not always incorruptible, that the all-seeing KGB is a myth.... In this connection is your committee taking any additional measures to control the situation?

[Gutsalov] We will develop such activity from the viewpoint of accounting and control.

[IZVESTIYA] Do you admit that there might be people even within your committee who cooperate with shady structures engaged on illegal business?

[Gutsalov] No, we are not directly involved in such operations. Our employees specialize in controlling and regulating legal operations from the viewpoint of safety and accounting of nuclear materials. They are not directly employed in enterprises which extract or process uranium.

Plans To Destroy Chemical Weapons Revealed

*MK0503122692 Moscow NEZAVISIMAYA GAZETA
in Russian 5 Mar 92 p 6*

[Yuriy Meshkov report: "Will Nuclear Explosions Be Heard? There Are Plans To Use Them To Destroy Chemical Weapons"]

[Text] President Yeltsin's trip to the closed city of Arzamas-16 attracted particular attention from foreign observers. The concerns of recent months are associated precisely with this city and the Experimental Physics Scientific Research Institute there. "How far may the

Russians go in their desire to earn hard currency?" is a question that is being asked increasingly often in connection with the nuclear conversion planned in our country.

Shortly before Yeltsin's visit to Arzamas-16 Moscow was visited by representatives of the legendary nuclear center. At a seminar organized by the Center for Independent Environmental Programs at the Russian Ministry of Environment and Natural Resources, they disclosed plans for eliminating chemical weapons by means of...nuclear explosions.

In a lengthy report Aleksandr Chernyshov, deputy director of the Experimental Physics Scientific Research Institute, tried to convince the audience of specialists, and also representatives of the antinuclear movement and environmentalists that the proposed technique for destroying highly poisonous toxins is absolutely harmless. However, existing experience of underground nuclear explosions makes it impossible to rule out the likelihood of radioactive and chemical contamination of the environment. A representative of Arzamas-16 who had come to Moscow, speaking outside the program of the meeting, so to speak, declared that "nuclear technologies are particularly dangerous in a country that does not think it necessary to construct public toilets and keep them clean. The country could not stand another Chernobyl...."

However, the authors of the plan are prepared to carry out an experiment as early as this spring by blowing up 20 tonnes of toxins packaged in containers. Only the nuclear moratorium for 1992 imposed by Yeltsin is keeping the military-industrial complex specialists from their planned explosions at the Novaya Zemlya test site.

Aleksandr Chernyshov reported that 40,000 tonnes of Russian [otechestvennyy] chemical munitions have to be destroyed. This can be done with just three nuclear blasts. However, according to Chernyshov, in fact about 10 explosions are planned.

Another fact that is causing some concern is the creation of the "Chetek" international closed joint-stock company with capital of 302 million rubles, whose shareholders include the Experimental Physics Scientific Research Institute. "Chetek" also has a subsidiary in Hamburg. The "Chetek" joint-stock company has been given exclusive rights to commercial use of the technology for destroying and burying chemical and nuclear waste by the method of thermal breakdown and vaporization in an underground nuclear explosion.

There is no certainty that, once the noble mission of ridding us of our own chemical weapons has been completed, international nuclear and chemical waste collected by the "Chetek" joint-stock company from all over the world will not pour into the Novaya Zemlya test site. For instance, in the West it costs \$100 to destroy 1 kilogram of highly toxic waste. As for our businessmen, they simply cannot get used to gambling on lowering prices....

In offering this way of getting rid of weapons of mass destruction, the military-industrial complex has its own interests; the same old explosions, the same old large numbers of personnel to prepare and stage them, the same old secrecy and therefore absence of controls....

In the very near future the Socio-Environmental Union Center for Independent Environmental Programs intends to hold another meeting for interested specialists and representatives of the green movement in order to discuss alternative plans.

Chemical Agents Confined to Russian Territory

LD0403233592 Moscow Radio Moscow World Service in English 1810 GMT 4 Mar 92

[Text] Media recently reported that there could be incidents involving chemical agents in Transcaucasus especially in the zone of the conflict between Armenia and Azerbaijan. Now Gen. Igor Yevstafyev, a deputy chief of the chemical troops of the CIS Combined Armed Forces, comments on these reports, the source of which is kept secret:

Unlike nuclear weapons which are on the territory of a number of our former republics, all Soviet chemical agents are on the territory of one republic—Russia.

And here is information from the Russian Foreign Ministry. The Minister's adviser Gen. Geliy Batenin says:

Chemical agents are all on the territory of Russia now. Their reserves are estimated differently—roughly 50,000 tonnes of poison chemicals.

As our observer has found out, the primary storage facilities are in the Saratov region and in Udmurtiya. However, the production of chemical weapons was underway in several republics, but was terminated back in 1987. What could then inspire fears?

Gen. Yevstafyev provides the following considerations: Firstly, some units involved in a conflict might have some irritants which are not chemical agents by international standards. Belligerence could have obtained such weapons abroad, the General believes, since there are no irritants in regular troops [as heard]. However, chemical defense units have chloropicrin that could have been yet another possible reason for rumors about chemical weapons in the areas of tension. In the meantime, chloropicrin is safe, being discharged even by tonnes, Gen. Yevstafyev said, it could only irritate eyes. It's used by troops for so-called smoking of gas masks, to imitate an aggressive environment to check [words indistinct].

Such are purely hypothetical causes of fears about possible incidents with chemical agents in the conflict zones across the former USSR, however, experts believe there are no real grounds for anxiety.

Reports of Weapons Pilferage in Germany Refuted

PM0503140592 Moscow Teleradiokompaniya Ostankino Television First Program Network in Russian 1500 GMT 2 Mar 92

[From the "Novosti" newscast]

[Text] The command of our Group of Forces in Germany has refuted a statement by Barzhanov, chairman of the Russian President's Office Committee on Conversion, which claims that much has already been stolen from our storehouses in Germany and so far it has proved impossible to draw up an inventory of property in storage. The statement by the command says that the Western Group of Forces has not encountered the problem of misappropriation of weapons. The group keeps a strict record of weapons and ammunition, and each combined unit's stocks correspond to the documentation.

Illegal Uranium Export Deals Investigated

PM0503161792 Moscow IZVESTIYA in Russian 4 Mar 92 Morning Edition pp 1, 3

[Yuriy Kovalenko report, citing interview with Herve Bryuzini [name as transliterated], French TV journalist; date not given: "Military Men, Brokers, and the Mafia Have Been Vying With One Another To Offer Everything—Including Nuclear Material"]

[Text] Paris—Journalists from Paris used a hidden camera to film a deal taking place in a Moscow apartment. The film will be seen throughout France on 11 March.

Are nuclear scientists leaving the CIS? Is the world menaced by the "escape" from Commonwealth countries of uranium essential for the production of nuclear weapons? Can it be obtained today in Russia and other republics of the former Soviet Union? Who is dealing in it? Military men, brokers, the mafia? Are the political authorities turning a blind eye to these deals, which promise millions in profit? What are they doing to prevent the clandestine export of fissile material? Answers to these questions have been sought by two well-know French television journalists who carried out an investigation in our country in the middle of January.

"Our film is in two parts," Herve Bryuzini, one of its makers, told me. "We made the first part with the Vzglyad program, which obtained permission to visit the previously closed city of Arzamas-16.

"Then—I would stress—we independently, without Vzglyad's help," Bryuzini went on, "looked into the problem of the 'escape' of military material. We had a conversation with Mikhaylov, deputy minister for nuclear power, who stated: 'I am working on these questions and I can assure you that there has not been, nor ever will be any leak' of material. Of course, this is the official viewpoint, which we understand."

"We also met with three military men—I do not know their names—who are engaged in selling stocks of weapons. We filmed the conversation with the military men without their knowledge. They offered to purchase aircraft, helicopters, submarines, and tanks for us. We enquired whether they might not be able to obtain nuclear material for us. They answered that they were ready to obtain scandium and germanium. Here the military men acknowledged that it is difficult to obtain an export license for these materials.

"One day colleagues of ours informed us that you could obtain whatever you wanted on the commodity exchange in Moscow. We filmed there during three days and met with many brokers. We got to know a broker who said that he was about to carry out a transaction outside the exchange—that it was illegal and connected with the sale of uranium. Shortly afterwards this man telephoned us and asked us to come over immediately. Several clients, he said, were meeting in a Moscow apartment. He gave us the address and proposed our meeting up there.

"We got there in advance and set up a hidden video camera. Our broker acquaintance agreed to wear a hidden microphone. We installed ourselves in the apartment below and listened to the whole conversation. For one hour 45 minutes our broker and three other people discussed the question of transporting what they called the 'commodity' in a sealed container weighing one tonne, which would cross all the borders as far as Kaliningrad."

"We subsequently learned that one of the people is a lawyer who represents a Russian-Austrian joint venture. Another person accompanying him was from the mafia. They said that they could buy off the customs officials without any special problems. They agreed on the money and delivery. One of them at some point in the conversation said: 'Don't worry, I don't intend to put a black triangle—the nuclear symbol—on the container.'" Another said that fortunately everyone could be bought, so if the container is detected at the border, nothing dreadful will happen.

"We were unable, of course, to get to see what was in the container and do not know where it is. We did not enter into contact with these people. But there is evidence of the existence of a clandestine network involved in exporting nuclear material. Our broker acquaintance claimed that the discussion was about uranium and a deal worth \$500,000. And uranium was indeed mentioned during the conversation. But as we are sticklers for complete accuracy and authenticity, we cannot guarantee 100-percent that we filmed a deal involving the sale of uranium, but it is quite probable that it was indeed the case.

"We have showed the film to specialists in both Russia and France. In their opinion, it could indeed be uranium. At the same time the various kinds of swindles which go on in your country have to be borne in mind.

"Therefore we approach the information we have obtained with circumspection and advise you to do the same. You have to realize that the broker who allowed us to shoot the film was risking his life. And my colleague, Dominique Tyers, and I intend to respect the agreement we made with him. The broker is engaged in something illegal, but that is his business. We do not intend to endanger his life or the lives of those who helped us make the film.

"We returned from Moscow very concerned, but we have no intention at all of creating a big sensational story. We have no intention of denigrating your country or causing it harm. Some people have seen the film in your country and they have not regarded it as defamatory or provocative. (There is a copy of it in Russia). On the contrary, this kind of thing could happen, in their opinion. We are trying to discover the true state of affairs. Our film stands as a warning to everyone, as a warning to world public opinion, about the possible dangers. Responsibility rests not just with politicians, but with journalists too. It is collective.

"We wish to treat the information obtained with the highest degree of seriousness. In our view, there do exist for the export of dangerous materials clandestine structures, structures ready to invest big money, but we do not know what kind of material or what quantity is involved. At the same time these structures are still being combated by the state, which continues to function, whatever some people may say there. Therefore it seems to me that the export of strategic materials remains a very difficult business. There is not a single piece of material evidence anywhere in the world of the discovery of enriched uranium-235 exported from Russia; save for the quantity of plutonium—clearly from Russia—found in the Italian city of Como. But at present Western special services do fear its export from your country."

"The task of journalists," stressed Herve Bryuzini, who two months ago left the state television station Antenne-2 and together with Dominique Tyers created the agency Theophraste, "is not to draw particular conclusions. They should state: These are the facts which we have... We know the names of these people. But we are not criminal investigators. Ultimately the question of names is not so important—let the police and special services deal with that. The journalists' role is to show the information and demand that politicians and specialists of all countries assess it. The crux is whether this strategic material could leave Russia. The security of the whole world is at stake."

"The 2 March issue of LIBERATION claimed that President Nazarbayev has authorized the export of uranium. What do you think about this?"

"I think that he could thereby endanger the whole world. But this problem concerns not just our country. France—at the government level—also sold fissile material in the past (particularly to Iraq—Yu.K.). Everyone bears his share of responsibility here."

...The film shot in Russia by Bryuzini and Tyers will be shown on France's Fr 3 channel on 11 March as part of the popular weekly program "La Marche du Siecle." The film will not be dubbed; for greater accuracy, it will be shown with subtitles. The faces of all participants in the deal will be hidden.

Army General Konstantin Kobets, Russian Federation state counsellor on defense; Mikhail Bazhanov, chairman of the State Committee for Conversion; French Defense Minister Pierre Joxe; the Italian investigator in charge of the case involving the plutonium discovered in Como; plus various experts have been invited to Fr 3's television studio. Pentagon boss Dick Cheney has also given his agreement in principle. The program makers have asked Marshal Yevgeniy Shaposhnikov to take part, but have not received a response to date. Work on the broadcast will continue right until it goes on the air.

World Center for Nuclear Scientists Urged

AU2802152092 Frankfurt/Main FRANKFURTER
RUNDSCHAU in German 28 Feb 92 p 14

["Slightly abridged version" of interview with Yevgeniy Velikhov, director of the Kurchatov Laser and Nuclear Research Institute, by ARD correspondent Gerd Ruge, carried by the ARD satellite station Eins Plus on the "Tagesgesprach" program on 25 February; place and date not given: "Russia Is Selling Its Missile Defense Technology Worldwide"]

[Text] [Ruge] Many observers in the West are speaking about the danger of Soviet nuclear weapons or the know-how on building such weapons or even experienced scientists appearing in Third World countries and helping them produce nuclear weapons.

[Velikhov] I think there is a potential danger in this respect. It is not the case that something could happen now. But we have many opportunities to prevent this danger in time. Such a danger exists everywhere in the world. The scientists who in the past were dealing with the development of nuclear weapons must try to find new jobs at a time that is marked by disarmament, and they must feel certain in international cooperation. That is why it is time to set up a center that could help these scientists. The center would also deal with ecological projects, new energy resources, and other tasks that are connected with the transition to the market.

[Ruge] Were steps in this respect initiated before the new international center was agreed upon, or are the two centers interrelated?

[Velikhov] The idea was in the air. I think the initiative of U.S. Secretary of State Baker and German Foreign Minister Genscher came at the right moment and is based on reality. The initiative was prepared by the course of events.

[Ruge] Do you think the situation in the CIS has made it necessary to set up an international center like this one?

[Velikhov] Certainly, it is very important to us for several reasons. First, there is the problem of nonproliferation of know-how. To solve this problem, scientists must feel certain in an international environment and must really be able to reorient themselves toward new technical areas. Second, there is the problem of preserving the intellectual potential. Russia and the former Soviet Union invested considerable energies and resources in science. A substantial part of this research work was financed from the military budget.

So the first objective is the nonproliferation of know-how, and the second is the preservation of the intellectual potential. But there is another goal, a third objective. Much of what was done in the area of basic research and on the basis of military research commissions is no longer required today. There is no use for these things in Russia now because our industry is in a crisis, and there is no money to promote new uses. That is why I believe that scientists, in particular Russian scientists, should work for the international market of new ideas. The center will be advantageous for the West and for us because the West will get new technologies and interesting ideas.

[Ruge] As you know, there is the problem of dual use regarding the results of such research. How can the results involving military and peaceful use be kept apart within the framework of the envisaged international cooperation?

[Velikhov] First, we are now considering a common defense system, which would in particular involve information systems allowing the global monitoring of events happening somewhere in the world. These systems would be linked with a global intelligence network. Such a system could be used for advance warning of acts of aggression on the Earth and for advance warning regarding natural disasters as well as technical disasters caused by man. That would be a natural way of using military technology. In this case, we could differentiate clearly enough between military and nonmilitary tasks.

[Ruge] Could you give us the approximate number of people whose know-how would be dangerous, if they were to go to the Third World?

[Velikhov] Our estimate is that between 3,000 and 4,000 scientists and engineers have specially important knowledge about building weapons at a high technological level. There are, of course, many scientists who have indirect knowledge. But we assume that the number is between 3,000 and 4,000.

[Ruge] Is there a possibility of controlling the emigration of scientists to other countries? Many scientists from the former Soviet Union have meanwhile worked in sensitive areas at other research institutes of the world, in the United States and in Germany, for instance. Do you

have any control of such people who have dangerous know-how and could go to the Third World with their knowledge?

[Velikhov] Information is one thing, control is another. We have, of course, all the information about these people. Regarding control, we have a liberal legislation now that is in line with the demands of the human rights charter. That is why we cannot control people by employing police measures. Control is necessary, but on the other hand, the living conditions and the working conditions of the scientists must be acceptable.

[Ruge] In what way will the CIS republics organize their future scientific cooperation? Will there be an academy of sciences as a controlling body comparable to the former academy of sciences, or will every republic pursue a different direction in scientific work?

[Velikhov] Cooperation will be complex. First, in the area of basic research, we are working together with the academies of sciences of the other republics. In addition, there are new international forms of cooperation. We will, for instance, set up an international laboratory which would be a free laboratory that would depend on voluntary financial appropriations for special research commissions. This form exists in all republics. The center that we are setting up will also have departments in Russia—for instance, in Chelyabinsk and Arzamas where nuclear weapons have been developed. I think another department will be set up in Kurchatov, in the Semipalatinsk area. We discussed this with Kazakhstan. There will probably also be a department somewhere in Ukraine because there is a large center in Ukraine that is internationally known for the development of ballistic missiles.

[Ruge] Which institutes in Russia will cooperate with the planned international center?

[Velikhov] We believe that direct connections will be created with Arzamas and Chelyabinsk-70. But the center will be in the small town of Troitsk near Moscow. We agreed on this because it is a good idea to have it there. We think a directorate should be formed that should consist of representatives from the founding countries—the United States, Germany, and Russia. The center should, however, be open to Western and non-Western countries and for groups of scientists from the former Soviet Union, irrespective of whether they come from CIS republics or not.

[Ruge] Regarding the idea—which was originally suggested by President Yeltsin and was taken up by President Bush—to consider U.S.-Russian joint research for a space-based missile defense system, do you think such a plan would have a chance?

[Velikhov] We have some experience in the area of technological exchanges, and we have conducted talks in this respect. Russian scientists—former Soviet scientists, most of whom are Russians—are in the lead in a number of technologies. There are other technological areas

where the Americans are leading. Therefore, the scientists have discussed the exchange of technologies for about five years, and something is already being done in this connection. The United States has asked us to show it our nuclear energy resources for space. Such energy resources are very important for long space flights and for space-based projects such as high definition television. There are also other forms of exchange, and we believe that this sector will be expanded.

It is also a foregone conclusion for us to exchange information. We should develop a system that warns us about any aggressive act, any incidental or non-incidental missile launch and ensures the quick exchange of information, so that tensions can be decreased and every possibility of an inadequate, inappropriate response is ruled out. This is very important because it is an improvement on the advance warning centers that we have created together with the United States. I think this warning system could be used jointly by the United States, Europe, and other countries that wish to join it, including Russia and the CIS republics. In addition, other serious aspects must be discussed. For instance, we are prepared to sell the technology of our missile defense systems—purely defensive systems. In our view, they are better than the U.S. Patriot missiles. We already have consumers worldwide and are prepared to expand this commercial form of cooperation. We have certain experience in missile defense. To be quite honest, in the past we did not consider missile defense very promising because of the state of confrontation during the "cold war."

Scientist on 'Unfounded' Fears of 'Brain Drain'

PM0303164792 Moscow ROSSIYSKAYA GAZETA
in Russian 3 Mar 92 First Edition p 7

[ITAR-TASS report under "Opinion" rubric: "On Problems of the Brain Drain and the Nuclear Power Industry"]

[Text] "Politicians' fears that our scientists in the Near East are working on the creation of nuclear weapons are unfounded," Academician Yevgeniy Velikhov, director of the Russian Kurchatov Institute scientific center, told your ITAR-TASS correspondent. "There are actually several hundred of our scientists working there under contract, but these are quite low-level specialists."

The task now is to redirect the activity of specialists connected with the development and creation of nuclear and chemical weapons and their delivery systems, the scientist stressed. That is why the International Scientific and Technical Center for the Support of Nuclear Scientists is being created. In March the center's charter is to be adopted and its coordinating council elected.

We have just as many concerns over the peaceful use of atomic power, the academician noted. One of the main concerns is to increase the security of nuclear power stations. There is concern over the decision to resume the operation of the Armenian nuclear power station as

there are no guarantees of its complete security. There is also the acute question of rehabilitating areas contaminated by installations previously closed down.

Special attention should be paid to space research, too. Until recently our civilian space program was the poor relation of the military space program. It is annoying to receive less than is possible from our space achievements, given its enormous potential. I hope that the decree on the creation of the "Cosmic Russia" agency will rectify the situation.

Minister: No Nuclear Scientists Working Abroad

*LD0503181192 Moscow TASS in English
0923 GMT 5 Mar 92*

[Text] Moscow March 5 ITAR-TASS—"Not a single Russian specialist working in nuclear armament field has gone abroad", the newly appointed Russian Minister for Atomic Energy, Professor Viktor Mikhaylov, said in an interview with the PRAVDA newspaper published today.

Touching on the conversion programmes worked out by nuclear specialists, Viktor Mikhaylov said: "We have immense opportunities in a very wide range of different spheres, such as the lasers, controlled explosions, new materials, use of super-powerful magnetic fields, etc."

According to Viktor Mikhaylov, the Russian Nuclear Centre, which is yet to be created, will carry out concrete research work. Among the first and the most important tasks of the centre will be non-proliferation of nuclear weapon technology, safety of nuclear materials and destruction of nuclear weapons.

Nationalists Warn Russia of Chemical 'Tools'

*LD0603092192 Moscow Radio Rossii Network
in Russian 0800 GMT 6 Mar 92*

[Text] According to an IMA-Press report, the main bulk of chemical weapons of the CIS Armed Forces is stockpiled in Tatarstan. The local nationalists warn that it can be used as a tool of bringing pressure to bear upon Moscow if Russia takes tough measures against Tatarstan.

Chemical, Biological Weapons Committee Set Up

*PM2702155892 Moscow ROSSIYSKAYA GAZETA
in Russian 28 Feb 92 First Edition p 2*

[Unattributed report: "Goodbye, Biological Weapons!"]

[Text] By decree of the Russian Federation president, a Committee on Convention Problems Relating to Chemical and Biological Weapons has been set up under the Russian Federation president. The committee's tasks are to resolve chemical and biological weapons convention problems, implement international and internal monitoring [kontrol] to prevent their development [razrabotka], production, and stockpiling, and also organize the elimination of stocks of chemical weapons.

Anatoliy Kuntsevich is appointed chairman of the committee.

Kazakh President on Nuclear Intentions

*PM2402162192 Moscow KRASNAYA ZVEZDA
in Russian 21 Feb 92 p 3*

[Untitled report by ITAR-TASS correspondent V. Smelov as part of a feature under the general heading "Commonwealth States Broaden Contacts With Outside World"]

[Text] Vienna, 20 Feb—Each CIS member state should be politically independent and free. However, it is necessary that the CIS remains a single economic area similar to West Europe, the European Community. Kazakh President N. Nazarbayev, who is on a working visit to Austria, stated this in an interview published in the Vienna newspaper KURIER.

People are asserting that the Soviet Union has collapsed, but this is not the case. The Russian Empire, about which the Russian leaders themselves talk, has fallen apart but this should not be made into a tragedy. The republics should now work together. Suffice it to say that 50 percent of all goods which are vitally important to Kazakhstan were imported from other republics, and these ties are not so easily broken, the president emphasized.

Answering a question on the fate of nuclear weapons situated on Kazakhstan's territory, N. Nazarbayev indicated that his country does not wish to be a nuclear power. However, time is needed to eliminate nuclear weapons. Russia, Belarus, Ukraine, and Kazakhstan, he reminded us, signed an agreement on creating a unified command of strategic armed forces. The question of the use of nuclear weapons is being decided among these republics, none of which can undertake anything autonomously in this area. N. Nazarbayev emphasized that Kazakhstan is participating in all negotiations on the reduction of nuclear arsenals.

However, Kazakhstan's neighbor China, the president noted, is a nuclear power, and so are Pakistan and India. Therefore, Kazakhstan's viewpoint is as follows: It will take at least 15 years to destroy the missiles. It would be desirable if China, Pakistan, and India followed Kazakhstan's example, he added.

Poll on Concentrating Nuclear Arms

*924P0090B Moscow NEZAVISIMAYA GAZETA
in Russian 19 Feb 92 p 2*

[INTERFAX report: "Will Nuclear Weapons Make Russia a Great Power?"]

[Text] How do you view the proposal for the concentration of all nuclear weapons of the former USSR in Russia? The All-Union Center for the Study of Public Opinion put this question to participants in a January poll. Some 1,597

persons were polled in Russia, 517 in Ukraine, and 240 in Kazakhstan, the "DATA" Agency reports.

Russian respondents showed the greatest enthusiasm for this proposal: 43 percent believe that this corresponds most to the interests of security.

Half as many respondents were of this opinion in Kazakhstan—21 percent—and 19 percent in Ukraine.

Some 39 percent of those polled in Ukraine, 30 percent in Kazakhstan, and 4 percent in Russia are opposed to the concentration of all nuclear weapons on the territory of Russia. In their opinion, this would afford Russia advantages over the other states of the Commonwealth.

About 15 percent of the participants in the poll in Russia, 8 percent in Ukraine, and 6 percent in Kazakhstan declared that such actions would do great harm to Russian security.

Strains Among Nuclear Countries Threaten CIS

MK0403142592 Moscow KURANTY in Russian
4 Mar 92 p 6

[Report by Mikhail Shchipanov: "Forecast: Happiness Lies Not in Warheads, But..."]

[Text] KURANTY's strategic forecast that the fraternal nuclear countries—Belarus, Ukraine, and Kazakhstan—will not allow Russia to enjoy being the only legal successor to the Union in the highly prestigious field of nuclear disarmament has proved totally justified. Happiness for Alma-Ata, Kiev, and Minsk does not of course lie in actually possessing the formidable weapons, but in the political influence with which the nuclear warheads are literally "stuffed." It is the weapons being eliminated that will be the "password" for these states to join the narrow group of countries that influence big-league politics. Such a speedy reaction from Washington, which straight off expressed readiness to discuss the key problems of getting rid of some of the weapons with all the nuclear "brothers and sisters" at once, was rather less predictable. However, it is by no means hard to understand the Americans.

First, the United States is establishing parallel relations with all the former Soviet republics and in this situation jealous Kiev and Alma-Ata must not be given reason to think that Russia will remain Washington's privileged interlocutor. Second, seeing the increasing split and squabbles within the Commonwealth itself, the Americans are relying more on exerting their own direct influence in ridding primarily Ukraine and Belarus of the Union's nuclear legacy. Lastly, reinforcing the U.S. disarmament concept is a factor of no small importance in the talks with all nuclear republics at once, since for a number of extremely obvious reasons it is easier for Ukraine, Belarus, and even Kazakhstan to back U.S. proposals rather than Russian proposals and thus once again put "overweening" Moscow in its place.

What emerges from all this scandal in the Commonwealth's noble family? Above all, Russia has to switch to regular consultations on disarmament problems with the three republics. Namely preliminary consultations, rather than merely handing out documents. And probably at the highest level, moreover. "Small" Minsk meetings may arise, confined to the "nuclear" members of the CIS. But the emergence of a Commonwealth of Independent States within the Commonwealth of Independent States threatens the Commonwealth with increasing erosion and will fit in quite well with the Ukrainian concept of the Commonwealth as the Union's winding-up commission.

Weapons Transfer From Belarus, Ukraine Denied

OW2502204092 Moscow INTERFAX in English
1900 GMT 25 Feb 92

[Transmitted via KYODO]

[Text] Yevgeniy Shaposhnikov, commander-in-chief of the CIS Armed Forces, denied rumors that nuclear weapons had been moved from Belarus and Ukraine to the village of Bershet, Perm region. According to the Perm-based newspaper (ZVEZDA), the marshal had said that to Russian parliamentarian from Perm Valeriy Fedorov.

Shaposhnikov invited the Perm parliamentarian to meet with Defense Ministry officials. Upon a study of the documents provided by the Defense Ministry, Fedorov confirmed that nuclear warheads had not been moved from any CIS states to West Urals.

Poll Views Possibility of Nuclear Weapons' Use

924P0086A Moscow NEZAVISIMAYA GAZETA
in Russian 15 Feb 92 p 2

[INTERFAX report: "What Might a Cause of War Be?"]

[Text] In a January poll of the All-Union Center for the Study of Public Opinion 29 percent of the participants in Ukraine believe that a lack of order and discipline in the Army and the accidental use of the weapons could now be a cause of using nuclear weapons. Some 24 percent of Russian respondents and 21 percent of Kazakhs are of the same opinion.

Some 1,597 persons were polled in Russia, 517 in Ukraine, and 240 in Kazakhstan, the "DATA" Agency reports.

"Owing to a lack of proper control of the storage of the weapons and the possibility of their falling into the hands of terrorist groupings" was how 28 percent in Russia, 23 percent in Ukraine, and 22 percent in Kazakhstan defined a possible cause.

Some 9 percent of Russians, 8 percent of Ukrainian respondents, and 7 percent of Kazakhs believe that a nuclear conflict could be a consequence of a decision of the leadership of this republic or the other to use nuclear weapons in an interrepublic conflict.

One out of every five Kazakh respondents believes that an attack by an external enemy could cause war, while 7 percent of Russians and 5 percent of Ukrainians are of this opinion.

The remainder could not say.

GERMANY

Businessmen Arrested for Arms Exports to Iraq

LD2502165592 Hamburg DPA in German 1556 GMT
25 Feb 92

[Text] Mannheim/Sinsheim (DPA)—Two managers of the Neue Magdeburger Werkzeugmaschinenfabrik GmbH in Sinsheim, near Heidelberg, have been arrested on suspicion of illegally exporting to Iraq machines and tools for the production of missile parts. The Mannheim State Prosecutor's Office today confirmed a report to this effect broadcast on the Mannheim private radio station Radio Regenbogen. The managers, responsible for the company's exports, were arrested on Monday [24 February] and arraigned before the magistrate today. No one was available at the firm to make a statement.

Peter Wechsung, head of the economic crime section of the Mannheim State Prosecutor's Office, replying to an inquiry, said that during a foreign trade inspection there were indications of illegal exports to Iraq. On 11 February, company offices and private homes of senior managers were searched and a large number of documents seized. After this, suspicion had hardened that the company had supplied Iraq with machine tools and tools made for the production of artillery missiles without a license from the beginning of 1988 to May 1990. In order to make the exports, the firm had presented false documents in order to obtain so-called negative certificates from the Office for Industry, which made the exports not subject to license.

NORWAY

Charges in Computers-to-Pakistan Case

92WP0161A Oslo AFTENPOSTEN in Norwegian
18 Feb 92 p 4

[Article by May Britt Broyn: "Two Indicted for Smuggling Computers"]

[Text] The Eidsivating district attorney has brought charges against a businessman and a computer expert after discovering that several Norsk Data computers, probably intended for manufacturing weapons, were smuggled into Pakistan.

A former high executive in Norsk Data and a businessman from Asker, both 50 years of age, are charged with violating the Law on Export Control—the punishment for which is five years in prison—in the sensational computer-smuggling case uncovered last summer.

According to the bill of indictment drafted by District Attorney Harald Strand, the two men supposedly collaborated to mislead Norwegian officials into thinking that three shipments of NOR 5400 computers were headed to England—while the actual destination was forbidden Pakistan. Two of the shipments arrived in Pakistan

before British and Norwegian authorities took action in late June and intercepted the third shipment in London.

All the shipments were routed through the London-registered firm Turner Wythe Energy Services, Ltd. The firm is run by a Pakistani businessman, Inam Shah. But Shah has not been indicted in the case, either by British or Norwegian authorities, said Wenche Flavik, chief of police for Asker og Baerum.

With the blessing of Norwegian authorities, Norsk Data exported numerous NOR 5400 computers to Pakistan right up until 1987. But when Norsk Data was denied the opportunity to inspect the computers, it sounded the alarm and warned Norwegian authorities that the computers could be used in the production of thermonuclear weapons.

One question pursued by investigators has been the identity of the person in Pakistan to whom the two 50-year-olds allegedly smuggled the Norsk Data computers. According to Flavik, police have learned that the computers which arrived in Pakistan last year went to the same person who received the previous Norsk Data computers. It is AFTENPOSTEN's understanding that the two men deny they are guilty of the charge. Their defense lawyers are Erling O. Lyngtveit and Kjell Dagestad.

UNITED KINGDOM

Government To Help Russia Reduce Nuclear Arsenal

LD2702163392 London PRESS ASSOCIATION
in English 1548 GMT 27 Feb 92

[Report by Charles Miller, PRESS ASSOCIATION
defence correspondent]

[Text] Defence Secretary Tom King today unveiled a multi-million pound package to help Russia complete its ambitious plans to cut its huge nuclear arsenal by two thirds. He said Britain would provide:—250 special containers for the secure transport of nuclear weapons;—20 armoured vehicles designed specifically for transporting the containers with the warheads;—Consultancy assistance in nuclear safety, the storage of fissile material for use in civil nuclear reactors.

Environment Secretary John Wakeham will visit Russia next week to discuss further how the assistance can be best used. The British moves follow talks with President Boris Yeltsin and Marshal Yevgeniy Shaposhnikov, commander in chief of the new Commonwealth's armed forces, on their recent visit to London.

A British technical team led by Dr Geoffrey Pocock, Mr King's principal technical advisor on nuclear matters, went to Moscow shortly afterward to meet their Russian counterparts. Mr King said: "The Russians asked for

assistance and advice on a number of nuclear matters and the government has agreed to meet their requests in full."

He said the vehicles, costing up to 1 million pounds sterling each, and the special containers would be built in Britain and provided to the Russians free of charge. A small number of British personnel would be based in Russia to help with the programme. Some 10 million pounds sterling has been earmarked from reserves to pay for the first year's costs.

Mr King said: "This will be the start of our contribution as one of the most critical and valuable contributions we can make protecting the world from what could be very major nuclear hazards indeed and very destabilising risks as well of proliferation."

Dr Pocock said the Russians had "considerable" problems storing fissile material and were seeking help from the United States as well as Britain. He said the problems had been exacerbated by the very ambitious time-scale the Russians had set themselves for dismantling their

nuclear weapons. But he emphasised Britain had no plans to become involved in the actual dismantling of the weapons themselves.

All tactical nuclear weapons are to be withdrawn from the republics to Russia by July and all the strategic weapons by 1994. However there will remain a major transport task within Russia itself for the next ten years.

It is a field in which Britain has well-established expertise and the Russians, uneasy about some of their transport systems, are keen to learn. Asked about the need for armoured vehicles, Mr King said: "You must have protection against some lunatic who might express his opposition to nuclear weapons in some irresponsible way. You must give them reasonable protection." Mr King concluded: "The task is an enormous one and the time-scale which they have set for its completion means that outside help will be necessary."

Experts from British Nuclear Fuels, who form part of the technical team to visit Russia, will be offering special advice on ways of using fissile material in civil nuclear reactors.

North Korea To Ratify IAEA Control Agreement

AU2602105092 Vienna DIE PRESSE in German
26 Feb 92 p 2

["kro" report: "IAEA Controls as of June?"]

[Excerpt] Vienna—North Korea intends to ratify a control agreement signed in January with the International Atomic Energy Agency [IAEA] before the end of April. This was announced yesterday by the head of the North Korean delegation, O Chang-nim, after the talks of the IAEA Board of Governors, currently convening in

Vienna. In that case, the first teams of inspectors might start its work in North Korea in June and examine nuclear plants there.

Pyongyang is being accused of developing nuclear weapons. The United States, in particular, put North Korea under pressure to open its nuclear plants to IAEA inspection. A corresponding agreement was signed on 30 January. O Chang-nim said yesterday that his country is not working on the production of nuclear weapons.

On Tuesday [25 February] Syria, a member of the Nuclear Nonproliferation Treaty for 20 years, also signed a control agreement with the IAEA. [passage omitted]

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